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INCREASE COMPETITIVE BALANCE IN EUROPEAN FOOTBALL, A STRATEGIC APPROACH

Bachelor Project submitted for the obtention of the Bachelor of Science HES in Business Administration with a major in International Management

by

Emilien Cretton

Bachelor Project Advisor:

Tim Connerton, HEG lecturer

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Hes·so GENÈVE
Haute Ecole Spécialisée de Suisse occidentale

Declaration

This Bachelor Project is submitted as part of the final examination requirements of the Geneva School of Business Administration, for obtaining the Bachelor of Science HES-SO in Business Administration, with major in International Management.

The student accepts the terms of the confidentiality agreement if one has been signed. The use of any conclusions or recommendations made in the Bachelor Project, with no prejudice to their value, engages neither the responsibility of the author, nor the adviser to the Bachelor Project, nor the jury members nor the HEG.

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Geneva, 29th May 2015

Emilien CRETTON

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Definitions and abbreviations

UEFA = United European Football Association

FFP = Financial Fair Play

CB = Competitive balance

CL = Champions League

RPL = Rights pooling by the league model

ICO = Individual club owner model

SC = Salary cap

CBA = Collective bargaining agreement

HGP = Home-grown players

GRS = Gate revenue sharing

Executive Summary

Over the last two decades, European football has gone through massive structural changes. The end of foreign player quotas (Bosman ruling) and substantial increases in revenue have paved the way toward today's two-speed Football hierarchy. Top teams' revenues have increased exponentially while there has been little change in revenues for lower budget clubs. As a result, a trend of competitive imbalance has emerged.

UEFA has tried to address these problems with Financial Fair Play (FFP), a regulation system which obliges teams to respect the principle of "break even", meaning that clubs must not finance themselves with loans and "favors" from wealthy owners. While FFP has been successful in limiting clubs' indebtedness and ensuring long term viability, it does not have the capacity to deal with competitive imbalance. As long as unequal distributions of revenue persist among teams and leagues, the issue of competitive imbalance will not be solved.

This paper focuses on identifying recommendations that could lead to improved competitive balance in football. What would better competitive balance achieve for fans? With player talent more equally distributed, outcomes of matches and league competitions would be more difficult to predict and thus more enjoyable for spectators to follow.

In arriving at the recommendations that are presented in this work, measures that have been successfully adopted in other professional sports are examined and tested.

Firstly, the distribution of TV revenue in the UEFA Champions League is tackled. By emphasising the importance of one home TV market (market pool), UEFA does not treat all teams equally. Therefore, a system of distribution without market pooling has been developed and proposed.

Secondly, the salary cap system was found to be a very effective tool in promoting increased financial equality among clubs and within leagues.

Thirdly, the possibility of introducing a playoff system in football was addressed. Playoffs would increase the uncertainty of outcomes until post-season, however, implementation would be complex and would require changes in the number of teams per league.

The results of this research reveal that tools to promote competitive balance do indeed exist, however, implementation barriers are quite high. Also, to avoid the threat of top teams deciding to break away and creating their own leagues if the regulating measures are too severe, compromises will be necessary in terms of the strictness of measures that will be adopted and applied.

Contents

List of Figures

1. Introduction

Today, more so than at any other time in the history of European professional football, on-field success of a team is directly linked to its availability of abundant financial resources. Twenty years ago, “small-market” clubs such as Ajax Amsterdam and Red Star Belgrade were able to hoist the UEFA Champions League trophy. But today, what are the odds for similar teams possessing inferior financial clout (as a result of being based in either small-market and/or economically disadvantaged regions) to win the “cup with the big ears?” Since the unique exploit of Porto’s UEFA Champions League victory in 2004, no teams from outside England, Germany, Italy or Spain have managed to win championships. And this year, for example, and continuing a 5-year trend, two Spanish clubs were in the semi-final, confirming that there is a domination on European football by a handful of teams. The banning of quota restrictions for foreign players (following the Bosman ruling in 1995) and increasing financial polarization are at the source of the problem.

What can the European football industry do to reverse this undesirable trend? What measures can possibly increase “competitive balance” in European football? Several solutions put forth which could improve competitive balance include (1) a more equal distribution of wealth among teams as well as (2) other important changes in governance such as salary caps and changes in the distribution of television revenue.

The goal of this research paper is to identify and examine the best elements from these proposals in order to formulate recommendations which could lead to improved competitive balance in European football. In addition, we will study the possible impact that each of our recommendations may have on competitive balance as well any implementation barriers that may result from adoption of our proposed measures.

1.1 Structure

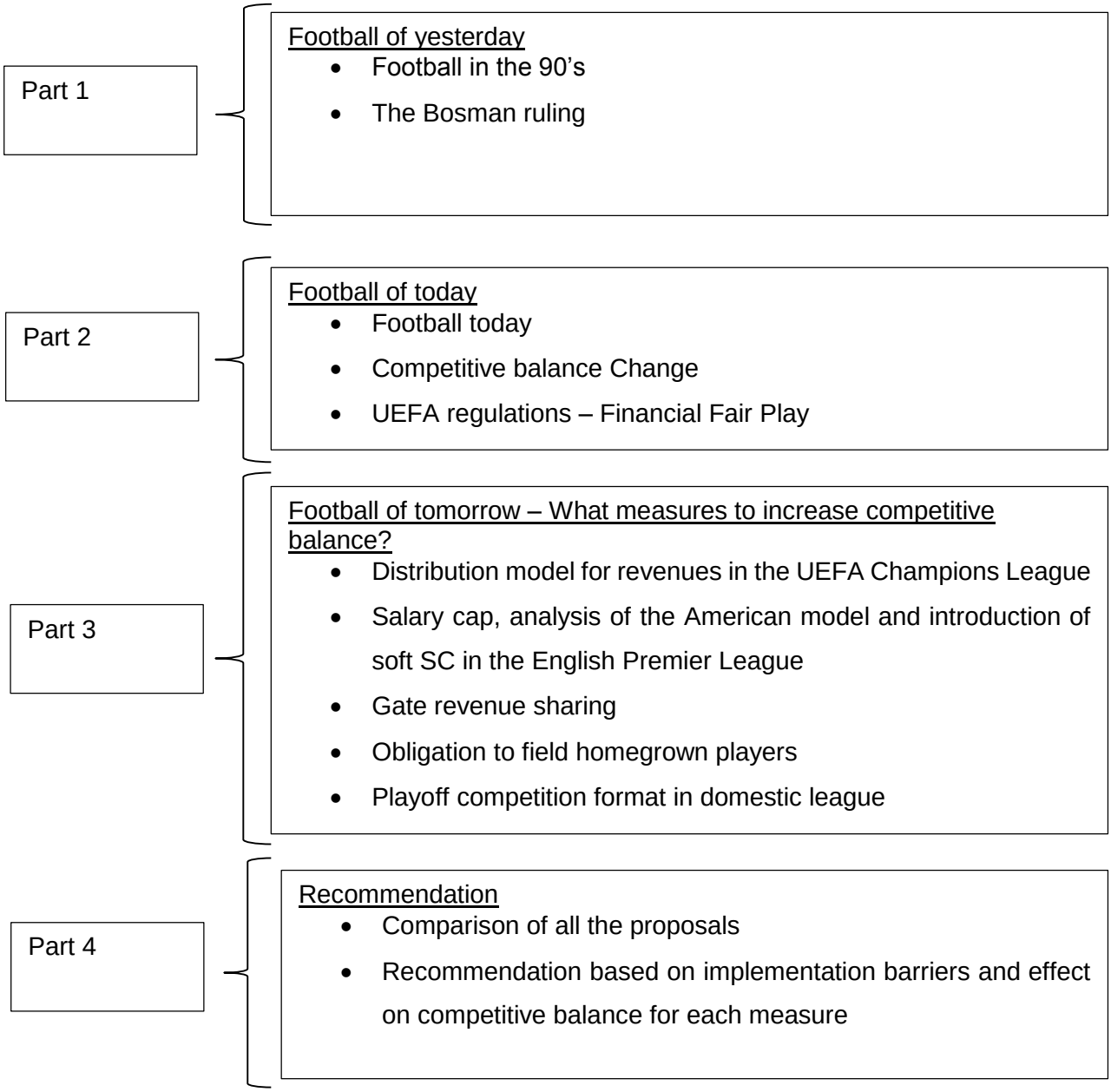
The initial approach in this paper will be to first determine and evaluate the driving factors in European football that cause changes in competitive balance.

Secondly, UEFA “financial fair play” (FFP) and its consequences will be introduced.

In the third section, measures that could increase competitive balance will be analysed and explored. Subsequently other solutions will be developed that may possibly go one step further than the financial fair play concept. Within this scope, the feasibility of

establishing a “salary cap system” based on the American sports model as applied in the English Premier League will be discussed.

Finally, a review of all proposed measures will be presented with respect to their implementation barriers and effect on competitive balance.



1.2 Literature review:

The concept of competitive balance (CB) was first introduced in 1956 by S. Rottenberg, a forerunner in the study of economics of sport. Introducing the theory of uncertainty of outcomes, Rottenberg posited that perfect competitive balance resulted in a 50%-50% chance of winning between two teams.[1] Rottenberg also highlighted the importance of CB in order to maintain fan interest, an important element in ensuring healthy financial balance for clubs.

Moreover, sports economics literature reveals the existence of three types of uncertainties which affect competitive balance:[2]

1. Match uncertainty
2. Seasonal uncertainty (intra-seasonal, mid-term)
3. Championship uncertainty (over several seasons, long-term)

In refining these factors, Késenne[3] argues that studies about game uncertainty and seasonal uncertainty are not as relevant as championship uncertainty, where people dislike seeing the same teams winning championships repeatedly year after year.

A more detailed review will be presented later in the competitive balance change chapter, including findings and metrics from the latest studies about CB in football today.

Many theoretical studies exist concerning the effects that financial sharing measures have on CB. In examining secondary data from these studies, one is able to select what measures to test. This research paper will attempt to contribute to the existing body of knowledge of this concept by assessing the consequences of new financial or governance rules in European football. First, however, let's compare and contrast among some of the important changes in European professional football of yesterday versus today.

[1] (Rottenberg, 1956), The Baseball Players' Labor Market Vol.64(3)

[2] (Goossens, 2006), Competitive balance in European football: comparison by adapting measures: National measures of Seasonal Imbalance and Top3

[3] (Késenne S. , 2007), The economic theory of professional team sports

2. Football in the early 90's - Prior to Bosman Ruling

The beginning of the 90's marked a milestone in European football, with many factors having contributed to a liberalization of the game resulting in increasingly large inflows of revenue. Notable changes which have occurred at the end of 20th century can be categorized in three levels (local, national, International)[4].

On a regional basis, football used to be highly reliant on gate receipts and subsidies for the bulk of its revenues. In countries where subsidies were not allowed, private investors would compensate. Although sponsorships existed, these were typically local arrangements whereby clubs would associate with companies who were geographically located nearby to the clubs. Examples are FIAT with Juventus in Turin, or Philipps with PSV, in Eindhoven.[5]

The table below reflects changes in the revenue model of French clubs between 1970 and 2000. Interesting to note is that it is only in the 90s that commercial revenue began to outweigh gate receipts.[5] The revenue model was based on the so-called SSSL finance model where receipts materialized from spectators-subsidies-sponsors-local sources.[5]

Figure 1 - The Evolving Structure of French Football Professional Clubs' Finance - (ANDREFF, 2000)

TABLE 2: The Evolving Structure of French Football Professional Clubs' Finance—Division 1 (1970 to 1998) and Division 2 (1993 to 1998) (percentages)

	Division 1								*Division 2*			
Receipts From	*1970-1971*	*1974-1975*	*1980-1981*	*1985-1986*	*1990-1991*	*1993-1994*	*1996-1997*	*1997-1998*	*1993-1994*	*1994-1995*	*1996-1997*	*1997-1998*
Spectators	81	62	65	50	29.4	25.4	21.9	19.9	15.3	15.9	15.3	12.8
Subsidies	18	29	20	21	23.8	19.4	14.7	11.8	35.7	27.0	23.1	20.6
Sponsors and advertising	1	9	14	22	25.6	24.7	26.3	20.5	17.3	20.4	25.6	21.9
TV rights	0	0	1	7	21.1	22.7	32.4	42.5	24.5	25.7	30.7	34.4
Other (merchandising, etc.)	0	0	0	0	0	7.8	4.7	5.3	7.2	0	5.3	10.3
Total[a]	100	100	100	100	100	100	100	100	100	100	100	100

SOURCE: National Football League and Bourg and Nys. (1996).
NOTE: Average finance calculated for all clubs in Division 1 and Division 2.
a. Excluding allowances for players' transfers that are accounted for in a separate balance sheet by professional clubs in other European countries (to facilitate comparisons with Table 3).

From a national perspective, changes occurred with the evolution in media. Traditionally, TV rights would be monopolized by public channels such as the ORTF in France or the BBC in England. Nevertheless, the arrival of cable TV and the creation of privately owned

[4] (Arne Niemann, Introduction: the transformation of European Football, 2011)

[5] (ANDREFF, 2000), The Evolving European Model of Professional Sports Finance

television companies such as Canal+ in France shook things up. Competition in the media industry brought significantly more money into football.

In terms of international scope, it can be said that a “Europeanisation of football” came about beginning with the change of the Champions League format in 1992 from a knock-out tournament to a tournament with group stages. As a result, the UEFA Champions League became more attractive, not only for fans, but also for sponsors and media broadcasters alike. This led to elevated championship prize money which allowed successful clubs the financial leverage to attract higher calibre player talent, thus consolidating their on-field dominance and becoming odds-on favorites to win league championships year after year. All of the above resulted in ever increasing fan interest, thus completing what could be referred to as a “power-cycle” business model for these fortunate clubs.

Indisputably, however, the most significant change which began feeding into this “power-cycle” business model occurred with the freedom of movement for European players. Indeed, before 1995, only three foreign players could be fielded by a team, due to restrictive quotas. As such, talent distribution was more homogeneous across Europe and teams could rely on nationally developed players to successfully compete. At the same time, with restrictive quotas in place, it was not possible for clubs, even with vast financial resources, to obtain an edge in terms of player talent. For example, teams such as Red Star Belgrade and Ajax Amsterdam, possessing excellent youth development and training programs, were able to win the Champions League, respectively in 1991 and 1995. Everything changed, however, with the so-called Bosman ruling that will be discussed and developed in-depth in the next sub-section.

2.1 The Bosman ruling

Jean-Marc Bosman was a Belgium footballer, playing for the Royal club of Liège, which was, at the time, struggling to keep its place in the Belgium top league. In 1990, as his contract was about to expire, the R.F.C proposed a renewal, cutting his wage, however, from 120’000 Belgian francs to 30’000 Belgian francs.[6] Bosman refused to accept this lower wage and desired, instead, to sign for a new club, USL Dunkerque, a second division French club. At that time, however, the rule in force was such that a player’s license was registered with the club he last played with and, unless the two clubs could reach mutual agreement on a transfer fee, Bosman would not be able to sign with

[6] (Schmidt, 2007), The effects of The Bosman-case on the professional football leagues with special regard to the top-five leagues

Dunkerque. Unfortunately, Dunkerque and Liège could not reach agreement on a transfer fee leaving Bosman with only two options: either accept a 75% wage cut or retire from football. With neither option acceptable, Bosman decided to pursue legal proceedings instead and his case was brought to court. The judgment was delivered by the European Court of Justice in 1995 resulted in the following outcomes:

- *« It became an illegal act to charge transfer fees for out-of-contract players who were moving to another club among the EU Nations."* [7]
- *"The 'Quota system' which dealt with how many foreign players were eligible for clubs was completely changed, and clubs were now permitted to field as many foreign players from EU Nations as they wanted, with no restrictions."* [8]

This arbitration reshaped European football. The result was the beginning of a "talent drain" towards high revenue leagues. In English leagues, for example, the concentration of foreign players increased from 20% in 1992 to 60% in 2007.[9] Another example is the victory of the Italian club, Inter-Milan, in the 2009/10 UEFA Champions League, having no Italian players in the starting eleven.

Moreover, the UEFA League ranking system completely reversed. The French championship La Ligue 1 descended from 2nd to 5th, whereas the English Premier League jumped from 7th to 3rd in 2001. Leagues with lower revenues such as La Ligue 1, Eredivisie and Portuguese Super-Liga were no longer financially able to retain player talent. "*This is a clear evidence of the distortion effects of "open" European football labor markets, and "closed" provincial football leagues."* [9]

[7] (Alan, 2011),

[8] (Alan, 2011),

[9] (Vrooman, 2007), Scottish Journal of Political Economy, Vol, 54, No 3

3. Football today

Today, football has become a substantial economic industry, accounting for 3.7% of Europe GDP and contributing to the employment of 15 million people in Europe.[10] The combination of new, incoming investors and technological advances in media, have brought in huge inflows of money. This business model can be encapsulated in the so-called "MC MMG" model, in which professional sports obtains revenue primarily from the Media-Corporations-Merchandising-Market as opposed to the "SSL" model (explained in football in 90's), where gate receipts were formerly the main source of revenue for clubs.[11]

As a result, top teams' revenues have sky-rocketed over the past fifteen years, growing by a factor of six, as shown in the figure below. And, this trend is not likely to reverse. As of the 2013/2014 football season, the top twenty wealthiest clubs have recorded a growth of 800M Euro (+14%) from 1997/1998.[12]

2013/2014 top 20 clubs revenues	6.2 Billion Euro
1997/1998 top 20 clubs revenues	1.2 billion Euro [i]

In the next sub-chapter, television broadcasting rights, new investors and new commercial strategies will be explored in more detail.

3.1.1 TV broadcasting revenues

A major part of revenue growth for European football can be explained by the increase in television broadcasting rights. Indeed, total broadcasting revenue for the big 5[13] has increased from €163 million in 1992 to over €3.5 billion in 2014 [14].

There are two types of revenue models for selling sports television rights, the ICO and the RPL models. In the individual club owner model (ICO), clubs negotiate directly with the media for selling TV rights of their own games.

In the second model, the rights pooling by the league (RPL), the league negotiates the TV rights for all the games, and then redistributes the money to the clubs.

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[10] (Arne Niemann, The transformation of European Football, 2011)

[11] (ANDREFF, 2000), The Evolving European Model of Professional Sports Finance

[12] (Deloitte football moneyleague, 2015)

[13] The big 5 correspond to the 5 biggest European football championships, English, Spanish, Italian, German, French

[14] (Statista, 2013) for 2013-2014 numbers, (ANDREFF, 2000) for 91-92

The ICO model is highly criticized by the small clubs, because it often puts themselves in weak bargaining positions. Big teams have better players and attract many more fans around the world, affording them better bargaining power and thus, the means to win championship titles. In Spain, where the ICO model is used, the ratio between the club which earns the most and the club which earns the least is 10:1, against 5:1 in England where the RPL model is used. Smaller-market teams are trying to reverse this downward cycle by investing massively, hoping for successful sporting results and reasonable returns on investment, however, this is a high-risk strategy that does not always ends well.

3.1.2 Rise in commercial revenues

Football clubs have become global brands, thanks to global sales of TV broadcasting rights and the rise of internet. Many successful teams now have their own TV channels and, thanks to the rise of social media, they can now engage directly with their fans all over the world. Fans have access to exclusive content such as videos of trainings, interviews and/or game highlights and, of course, online stores. Real Madrid and Barcelona, for example, have more than 80 million followers on Facebook, the equivalent of almost two times Spain's population. As a result, sponsors are increasingly eager to exploit clubs' broadening public visibility and to associate their brands with football.

Moreover, new sponsorship deals are reaching lofty peaks. As an example, Manchester United, the most valuable football entity in the world with a total share value of over £2.1 billion, have recently signed a £750 million kit deal with Adidas.

3.1.3 New investors

The liberalization of the market and the change in clubs' legal status has paved the way for an entrance of new investors in football. These investors can be split into two groups: (1) owners who have a long-term financial interest in acquiring and developing a club and (2) owners who are financially disinterested (i.e., owning a football club holds more personal and/or emotional interest for them rather than financial interest).

Long-term oriented investors are interested in developing the club's assets, thus increasing the market value of the club. There are many examples, especially in the English Premier League, where a few clubs are owned by American sports consortiums who are developing the infrastructure and merchandising.[15] "*A synergism can develop*

[15] (MAINWARING, s.d.), http://online.wsj.com/ad/article/businessoffootball-owning.html

as a result of the interaction between sport and business. Merchandising, for example, has long been a practice of clubs. But they lacked the resources for full-scale marketing. Specialists are now doing a better job of promoting a larger variety of team merchandise to greater numbers of people across broader geographic areas."[16]

Viewing from different angles of the spectrum, football has become an investment vehicle as well for certain investors who are looking to promote their personal image or the image of their countries via the backing of multi-national investing consortiums. Such is the case with the Paris Saint-Germain (PSG) club, which has been acquired by a Qatar investment group for the sole purpose of associating Qatar with major league football prior to the 2022 World Cup which will be hosted by Qatar. Other examples are individual investors who are contributing to the massive injection of money in Football. Probably the most famous of from this group of investors is Roman Abramovich, the Russian oligarch, who is said to have lavished £1 billion of his own fortune over ten years and which has brought Chelsea to the top of European football.[17]

This inflow of money has certainly contributed to the inflation in both transfer fees and salaries of football players in recent years.

[16] (ANDREFF, 2000), The Evolving European Model of Professional Sports Finance

[17] (Austin, 2013), http://www.bbc.com/sport/0/football/23064770

3.2 Competitive balance change in European football

What is competitive balance? Why is important? How do we measure it? How is the competitive balance in European Football?

"One of the key ingredients of the demand by fans for team sports is the excitement generated because of uncertainty of outcome of league games… In order to maintain fan interest, a sports league has to ensure that teams do not get too strong or too weak relative to one another so that uncertainty of outcome is preserved."[18]

"CB refers to balance between sporting capabilities. The more balanced the teams, the more uncertain the outcome of each match. A lack of CB will draw less spectators and media and reduce the total income for a league."[19]

So, it seems vital to maintain a certain threshold of competitive balance in order for a league to attract as many fans as possible. Also, in each of these definitions, the principle of uncertainty of outcomes is referred to. Perfect Competitive balance can therefore be explained as an equal probability of winning the game between two teams. Or, Perfect CB may be expressed as well as in terms that each participating team has equal odds of winning the championship. Competitive balance in European football, however, is not only about matches leading to championship trophies, it can also be applied with respect to promotion/relegation matches or for European qualification placement matches, for example. With respect to the methods of calculating competitive balance there are two approaches:

- **Static CB approach**

  Where CB for each standing position in the league is measured. For example: comparing the number of percentage points of the top five teams to the total of points for the league (C5 index). Moreover, this method compares the uncertainty of outcomes when the league leader plays against the lower classified teams. Statistical tools such as the standard deviation or Gini index are often used with this model. The static measurement approach is highly statistical and is therefore used mainly by researchers and less so for the media and fans due to the difficulty in grasping this technique.

- **Dynamic CB approach**

[18] (Quirk, 1992), Sport remains dominant driver of sponsorship

[19] (MICHIE, 2004), Competitive balance in football: trends and effects

Focuses on measuring how many times a team has won championships over a given period of time. In this model, the focus is on one or several teams and their results within the league, to determine if it is often the same ones who finish at the top or the bottom of the league. This method is easier for the public to understand, however, it does not produce academically rigorous results.

Dynamic CB measurements in European leagues :

- In the English Premier League, only five different teams have participated in the Champions League in the last ten years.
- Spanish clubs Barcelona and Real Madrid have won nine of ten championships over the past ten years. Also, for the two periods, 1999-2004 and 2008-2013, the Spanish la Liga winner's average points total rose from 75.8 to 96.4.[20]
- Juventus has won four consecutive championships in the Italian Serie A League over the past four years.
- In Germany, Bayern has been crowned champion for the third year in a row.
- In the Swiss Super League, Basel has won seven out of the past ten championships, and Zurich won in each of the other three years.
- Since the Bosman ruling (last 20 years), only one team which was not from one the top four most financially powerful leagues managed to win the UEFA Champions League.

This is a non-exclusive list of Dynamic CB trends taken from several selected domestic leagues only. And, as stated above, although fans and the media typically rely on this data in evaluating competitive balance, results of dynamic CB measurements are not considered academically rigorous and, therefore, should be understood in this context. For a more complete and statistically accurate accounting, based on a larger set of league data, the static CB measurements method should be used.

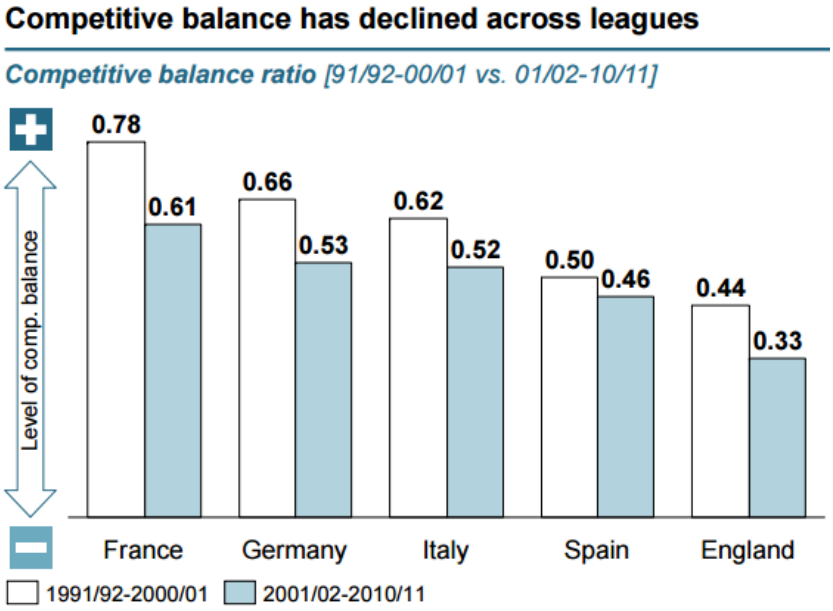
Static CB measurements in European leagues

The latest findings from Static CB measurements in European football are dated from 2013. In the study "How exciting are the major European football leagues", professors Bloching and Pawlowski (a scholar in the UEFA Research Grant Program) compared CB in the five major European leagues from 1986 to 2011.

[20] (MARCOTTI, 2013), The Wall Street Journal, Champions League Gap Widens

The competitive balance[21] ratio was used to assert long term CB in the five major leagues. CB measurements for each of these leagues decreased over the last ten years. The English and Spanish leagues trailed the French, German and Italian leagues in terms of uncertainty of outcomes. 22

Figure 2 - CBR ratio for big 5 leagues over the last 20 years - (Blocching, 2013)



With respect to short term CB, the authors compared betting odds between matches and no major differences over the years were found. Similar outcomes for middle term uncertainty were discovered which included as well competitive match results for European qualifying placements and promotion/relegation matches.

[21] COMPETITIVE BALANCE RATIO (CBR) = SDLP / SDTP

SDLP is the standard deviation of the league points. Individual team points in a season / Average points in the league

SDTP is the Standard deviation of a team points. Individual team points/ Average points of that team over several seasons

[22] (Blocching, 2013), How exciting are the major European football leagues

3.2.1 Wages vs. Sporting results relationship

What are the relationships between teams' robust financial resources and their Sporting results? Between 2009 and 2010, the difference in expenditures among Europe's top ten wealthiest teams, and ten to twenty "less-wealthy" teams increased two-fold.[23].

And this is a figure that shows the difference among only the wealthiest teams. Does a financial gap, however, necessarily make for a difference in results?

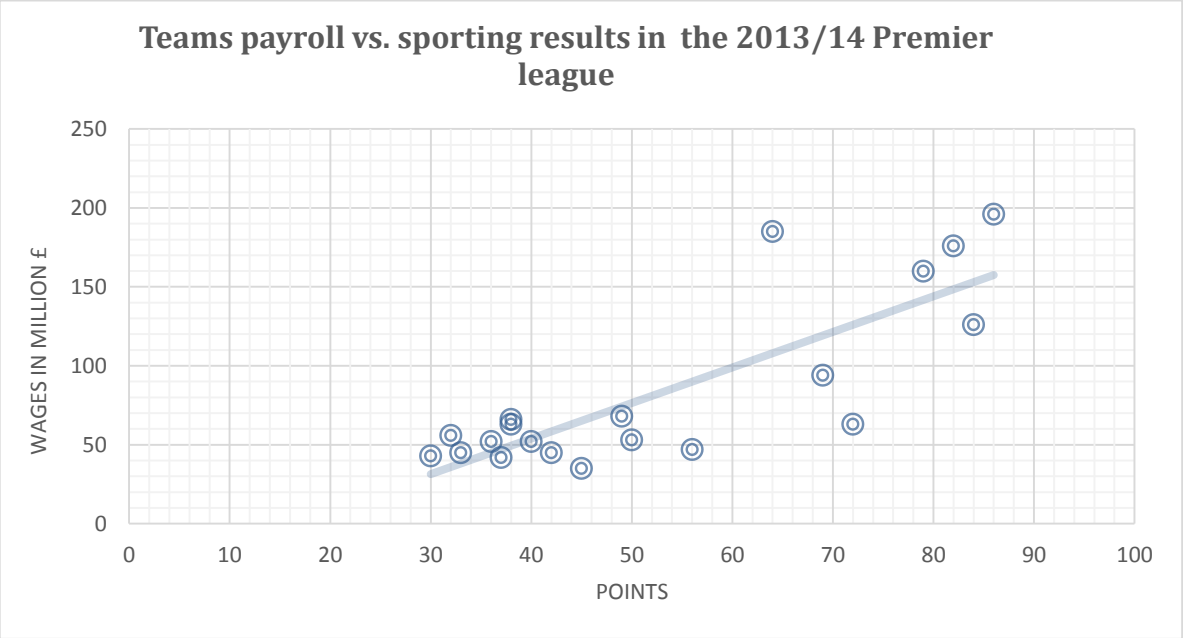
The following table represents the ranking in terms of points for the 2013/14 premier league. In addition, we have added the wage expenditures for each team. Manchester City, the team that spent the most on wages finished in first place. The team with the smallest wage expenditure, Crystal Palace, finished eleventh. And Everton, with a wage budget three times less, managed to rank ahead of Manchester United. These statistics show that Football is not only about money. Long-term managerial vision and a tight-knit group can still make a difference.

Figure 3 - Premier league 2013/14 standings

2013/13	Teams	Points	Wages in million £
1	Manchester City	86	196
2	Liverpool	84	126
3	Chelsea	82	176
4	Arsenal	79	160
5	Everton	72	63
6	Tottenham Hotspur	69	94
7	Manchester United	64	185
8	Southampton	56	47
9	Stoke City	50	53
10	Newcastle United	49	68
11	Crystal Palace	45	35
12	Swansea City	42	45
13	West Ham United	40	52
14	Sunderland	38	66
15	Aston Villa	38	63
16	Hull City	37	42
17	West Bromwich Albion	36	52
18	Norwich City	33	45
19	Fulham	32	56
20	Cardiff City	30	43

[23] (UEFA, The European Club Footballing Landscape, Club Licensing, 2010)

However, even though the sporting results vs. wages relationship analysis is not perfect, a very strong linear correlation does exist as we can see on the graph below. And over the last ten years, only five different clubs have ranked in the top four places of the Premier league.



3.2.2 CB consequences on attendance

Attendance depends on many variables:

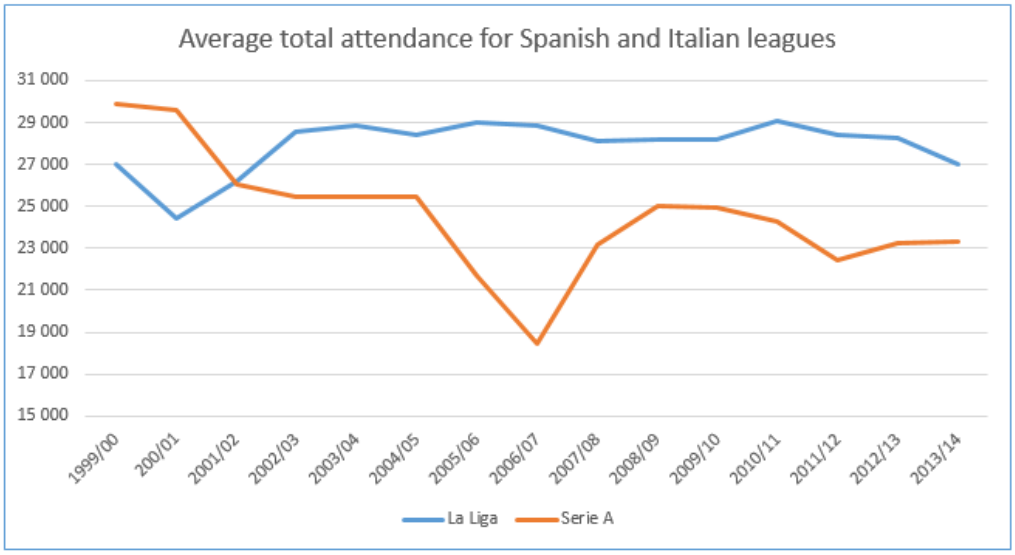
- Sporting results
- Ticket prices
- Quality of facilities
- Economic environment

CB, however, is also one of the criteria as, according to Rottenberg, more CB attracts more fans.[24] Since the decrease in CB over the last ten years, it might have been logical to expect a negative impact on the number of spectators visiting European stadiums every weekend. However, attendance for most European league matches actually increased, especially for Germany, England and France. This phenomena can be explained, on one hand, by recent investments in new facilities, which improved stadiums' overall comfort and capacities. On the other hand, the increase of marketing expenditures as well as the internet has allowed clubs to improve interactive communications and attract more fans.

[24] (Rottenberg, 1956), The Baseball Players' Labor Market Vol.64(3)

In Spain and Italy, however, where there have been no major upgrades in stadium facilities over the past twenty years, results seem to suggest more correlation between CB and attendance. The figure below shows that over the last decade, Italian Serie A average attendance has decreased by 6'000 spectators per match. Concerning La Liga (Spanish league), attendance has remained somewhat stable.

Figure 4 -Average total attendance for Spanish and Italian leagues[25]



Taking a closer look at detailed numbers for the Spanish league, attendance records for both the 1999/00 and the 2013/14 seasons were compared. The average attendance is the same. The figures are distorted, however, by Real Madrid and Barcelona, the two clubs who have won nine of the past ten championship titles and who dominate la Liga. This analysis, then, confirms that the increase in spectators for those two powerhouse teams counterbalance a diminished average attendance for the other teams in the league.

Figure 5- Average attendance for Real Madrid and Barcelona

2013/2014			1999-2000			
Ranking that year	Club	Average in thousand	Ranking that year	Club	Average in thousand	Change in %
2	FC Barcelona	72,116	2	FC Barcelona	65,526	10,06%
3	Real Madrid CF	71,558	5	Real Madrid CF	59,316	20,64%

[25] (Attendances Spanish league, 2015), http://www.european-football-statistics.co.uk/attn.htm

Figure 6 - La Liga teams decrease in average attendance

2013/2014			1999-2000			
Ranking that year	Club	Average in thousand	Ranking that year	Club	Average in thousand	Change in %
8	Valencia CF	36,435	3	Valencia CF	40,368	-9,74%
4	Athletic Club de Bilbao	32,851	11	Athletic Club de Bilbao	34,474	-4,71%
20	Real Betis Balompié	30,688	18	Real Betis Balompié	38,684	-20,67%
11	Málaga CF	22,325	12	Málaga CF	27,526	-18,89%
7	Real Sociedad de Fútbol	23,545	13	Real Sociedad de Fútbol	25,221	-6,65%
9	RC Celta de Vigo	20,57	7	RC Celta de Vigo	22,711	-9,43%

The decrease in attendance for some teams, therefore, cannot be explained by sporting results alone as teams with similar sporting results over the years have diminished in average attendance. The economic crisis in Spain and/or the increase in ticket prices may explain this difference. This leaves one option remaining, which is the change in competitive balance.

3.2.3 Other CB change observations

As explained in the previous sections (cf. football in the 90s and football today), there have been dramatic changes in the financing structures of clubs, as well as in the governance of football. But what are the consequences on CB? How has CB evolved in the last decade?

Putting the focus on championship uncertainty in the five major European leagues, the diversity of teams that have been able to finish in the top three, at least one time over the past 40 years, were tracked. Finishing in the top three is especially important as it guarantees a qualification to the UEFA Champions League, which brings more revenue to teams.

Even though a static measurement of CB, the following table shows what kind of teams were able to reach the top 3 in the last 4 decades. Are these teams still in the top positions today? Are they from a small or large market? (sizes of the cities and fan bases).

Figure 7 - Diversity in teams that have been able to reach the top 3 at least 1 time for the big 5 leagues

ITALY															Total
1975-1984	Milan	Roma	Juventus	Inter	Napoli	Torino	Perugia	Vicenza	Fiorentina						9
1985-1994	Milan	Roma	Juventus	Inter	Napoli	Torino	Verona	Sampdoria	Parma						9
1995-2004	Milan	Roma	Juventus	Inter	Lazio	Udinese	Fiorentina	Sampdoria	Parma						9
2005-2014	Milan	Roma	Juventus	Inter	Lazio	Udinese	Napoli								7
SPAIN															
1975-1984	Barca	Real	Sociedad	Zaragoza	Bilbao	Sporting de G.	Atletico								7
1985-1994	Barca	Real	Valencia	Sociedad	Deportivo	Zaragoza	Bilbao	Espanyol	Atletico						9
1995-2004	Barca	Real	Valencia	Sociedad	Deportivo	Mallorca	Bilbao	Betis							8
2005-2014	Barca	Real	Valencia	Atletico	Villareal	Seville									6
ENGLAND															
1975-1984	Derby Co	Everton	Man utd	Liverpool	Man City	Queens Park R	Notthingham	Ipswich To	Aston Villa	West Bromwich	Southampton	Watford			12
1985-1994	Arsenal	Everton	Man utd	Liverpool	Newcastle	Leeds	Notthingham	Blackburn	Aston Villa	Sheffield Wedn.	Crystal Palace	Tottenham	West Ham	Norwich	14
1995-2004	Arsenal	Chelsea	Man utd	Liverpool	Newcastle	Leeds	Notthingham	Blackburn							8
2005-2014	Arsenal	Chelsea	Man utd	Liverpool	Man City										5
GERMANY															
1975-1984	Bayern	Werder	Hamburge	Stuttgart	H. Berlin	Eintracht Brau	Köln	Kaiserslaut	Borussia M.						9
1985-1994	Bayern	Werder	Hamburge	Stuttgart	Leverkusen	Dortmund	Köln	Kaiserslaut	Borussia M.	Bayer Uerdingen	Eintracht Frankfurt				11
1995-2004	Bayern	Werder	Hamburge	Stuttgart	Leverkusen	Dortmund	Shalke	Freiburger	H. Berlin						9
2005-2014	Bayern	Werder	Hamburge	Stuttgart	Leverkusen	Dortmund	Shalke								7
LIGUE 1															
1975-1984	Lyon	Monaco	Paris	Marseille	Auxerre	Bordeaux	Nantes	Saint-Étien	Sochaux	Lens	Bastia	Strasbourg	Nice		13
1985-1994	Lyon	Monaco	Paris	Marseille	Auxerre	Bordeaux	Nantes	Monptelie	Toulouse						9
1995-2004	Lyon	Monaco	Paris	Marseille	Auxerre	Bordeaux	Nantes	Lille	Metz	Lens					10
2005-2014	Lyon	Monaco	Paris	Marseille	Auxerre	Bordeaux	Monptelier	Lille	Toulouse						9

The data was collected from the websites of the respective leagues.

The result is clear, never in the last 4 decades; there has been so little diversity in the number of teams able to finish in the top three as per today. The most obvious change happened in the English league, where in the years 1985-1995, 14 different teams reached the top 3 positions. On the contrary, in the last decade (2005-2014) only 5 different teams reached the top 3 positions between. Even though it is more clear in England, this phenomenon happened in all the big 5 leagues, where many teams who formerly played major roles in their respective leagues prior to the Bosman ruling, disappeared from top positons, such as :

- Fiorentina, Sampdoria, Parma
- Leeds, Notthingam Blackburn rovers
- Lens, Metz, Nantes
- Keiseslautern, Freiburger, Hertha Berlin

Common attributes shared among a number of these clubs includes smaller market size (population base), and an overall smaller fan base than others. The importance of pay per view TV and increased merchandising revenues for their competitor teams rendered these smaller-market clubs unable to compete sportively for the top positions.
Some of these teams have been relegated to second division status (i.e., Nottingham, Blackburn Rovers, Auxerre, Lens, and Nantes). Italian clubs Fiorentina and Parma have gone bankrupt trying to circumvent their competitive gaps by creating virtuous cycles. These strategies did not work and has resulted in bankruptcy for both teams. A virtuous cycle is defined as the improvement of sporting results due to deployment of increased financial resources. [26]

[26] (Baroncelli, 2006), Italian Football

Figure 8 - The virtuous cycle between sporting results and economic gain[27]

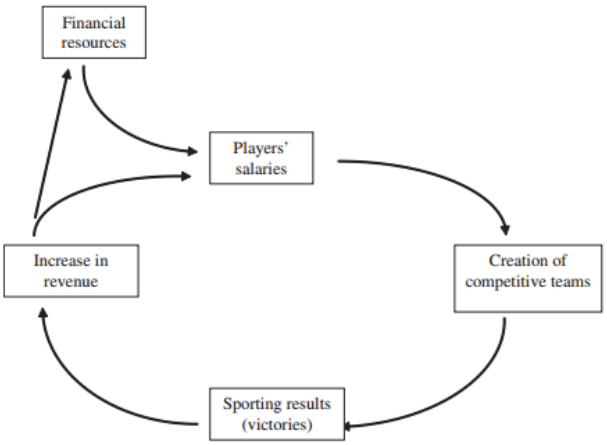


Figure 1: The Virtuous Circle Between Sporting Results and Economic Gain (Leading Clubs)
SOURCE: Lago, Baroncelli, and Szymanski (2004). Reprinted with permission of Egea.

3.2.4 Conclusion for competitive balance change

Uncertainty of outcomes in European leagues has decreased and, as a consequence, results of matches are becoming easier to predict and football is less exciting for fans. Many well-known and respected teams having enjoyed hard-earned reputations as perennial contenders for league championships in a bygone era, have fallen by the wayside competitively. This is all due to the shift away from financial balance within leagues that has occurred since the Bosman ruling. Indeed, there is strong correlation between sporting results and the size of club payrolls and, without doubt, teams possessing robust financial clout have far better chances of winning than not.

In addition, there is a link between competitive balance and attendance, as demonstrated in Spain and Italy. Where, except for the teams who compete every year for league titles, consolidated attendance for all teams combined has steadily decreased over the past fifteen years.

3.3 UEFA regulations – Financial Fair Play

The future of football is directly linked to the financial health of clubs and their ability to maintain a balance between their revenues and spending. In this scope, UEFA has introduced the Financial Fair Play, which is an extension of the actual licensing system for clubs participating in UEFA competitions.

[27] (Baroncelli, 2006), Italian Football

The first system of licensing was designed in 1999 following the Bosman ruling and its inflation effect and the scheme was obligatory only for clubs competing either in the Europa League or the Champions League.[28] This new licensing system came into force for the 2004-2005 season and included various criteria with respect to infrastructure (safety standards for stadiums), staffing and financial requirements. Clubs were required to provide annual audited financial statements, proof that clubs had no overdue liabilities related to transfer activities as well as proof that clubs owed no debts to employees (i.e., past due wage payments, etc.). Despite the fact that clubs had to provide proof of solvency, this did not stop a number of clubs from becoming indebted in order to finance transfer fees or even pay salaries.

Figure 9- Top division net losses FY 2006-2010 - Source[29]

Although revenues increased for the period 2006 to 2010, rising costs out-paced revenue growth which created risk to the financial health of football. This fact is borne out on the chart above which reveals that each year for this time period shows the net loss margin

[28] UEFA champion's league and Europa league are the 2 championships for the European clubs. In order to qualify for it, clubs must reach a certain position in their respective national championships.

[29] (UEFA, The European Club Footballing Landscape, Club Licensing Benchmarking Report Financial, 2010)

increasing, meaning that teams from top divisions have lost significantly increasing amounts of money every year.

In this context, UEFA decided to introduce new rules (Financial Fair Play) for the licensing of clubs, the main objectives are (UEFA)[30] :

- *to introduce more discipline and rationality in club football finances*
- *to decrease pressure on salaries and transfer fees and limit inflationary effect*
- *to encourage clubs to compete with(in) their revenues*
- *to encourage long-term investments in the youth sector and infrastructure*
- *to protect the long-term viability of European club football*
- *to ensure clubs settle their liabilities on a timely basis*

To put it in a nutshell, UEFA's FFP has two main aims: first, to protect the long term financial sustainability of European football; and secondly to restore competitive balance between clubs and leagues[31].

3.3.1 Application of the FFP

So in practice what does FFP imply for clubs? Basically, clubs are not allowed to spend more money than they generate, respecting the principle of break even. However, it is interesting to note that UEFA does not include youth development, community development and cost of tangible assets as relevant expenses.[32] Therefore, UEFA is encouraging teams to invest in infrastructure in order to develop middle to long-term incomes.

Concerning the application of FFP, it is somewhat complex, as a progressive approach is used in the implementation of FFP. According to article 61, al 2 of the UEFA clubs licensing FFP regulation[32] :

The acceptable deviation is EUR 5 million. However it can exceed this level up to the following amounts only if such excess is entirely covered by contributions from equity participants and/or related parties:

[30] (UEFA, UEFA, The European Club Footballing Landscape, Club Licensing Benchmarking Report Financial Year 2012, 2012)

[31] (VÖPEL, 2011), Do We Really Need Financial Fair Play in European Club Football? An Economic Analysis

[32] (UEFA, UEFA clubs licensing financial fait play regulations, 2012)

a) *EUR 45 million for the monitoring period assessed in the licence seasons 2013/14 and 2014/15;*
b) *EUR 30 million for the monitoring period assessed in the licence seasons 2015/16, 2016/17 and 2017/18;*
c) *a lower amount as decided in due course by the UEFA Executive Committee for the monitoring periods assessed in the following years.*

Therefore, if balanced out by shareholders, up to a certain threshold, losses are still considered acceptable. If the threshold is exceeded, a wide list of sanctions can be applied, by the UEFA Financial Control Body such as a fine, deduction of points or even the disqualification from UEFA competitions.[33]

Actual sanctions were first applied in 2014 to nine clubs including Manchester City (England), Paris Saint-Germain (France), Galatasaray, Trabzonspor and Bursaspor from Turkey; Zenit, St Petersburg, Anzhi, Makhachkala and Rubin Kazan from Russia; as well as Levski Sofia from Bulgaria.[34]

Both Manchester City and PSG have agreed to pay €60 million to reach settlements with UEFA. In addition, both clubs have agreed to wage "freezes" and limits to transfer spending over the next two seasons. If these requirements are met, both clubs will be eligible to recover €40 million back within two years.

3.3.2 Critics of FFP

As stated above, the main goal of FFP is to provide more equilibrium in clubs' finances, as well as to promote competitive balance for the leagues. Several published articles, however, have been openly critical with respect to the ability of FFP to restore competitive balance.

One of the main criticisms regarding FFP is the fact that some clubs are allowed to incur financial losses, up to certain thresholds, under the condition that one or more stakeholder(s) are willing and able to guarantee the loss.

This raises serious controversy in that it means that fortunate clubs bestowed with access to generous donors will cause less fortunate clubs who do not happen to have such good fortune to become disadvantaged.

[33] (UEFA, « Procedural rules governing the UEFA Club Financial Control Body », article 29 Edition 2014, 2014)

[34] (ESPN, 2014)

Another issue concerns the self-perpetuating spiral of success. Success leads to higher revenues for clubs, which can then be invested in acquiring the best talent, coaches and managers, thereby creating a competitive advantage compared to other teams. Break-even requirements are going to prevent other clubs from catching up with top-tier teams. This sentiment was expressed by the president of PSG, Al Khelaifi, who said, "FFP protects the big clubs and obliges the smaller ones to remain small clubs."[35] The mechanism is simple, as was demonstrated in the competitive balance section, that there is a correlation between high revenues and good results in football. Therefore, as the financial gap between top teams and smaller teams is allowed to increase, it does not seem achievable for FFP to bring back competitive balance.

In addition, as mentioned, UEFA does not consider investment in infrastructure as an "expense." Yet, it is argued that investors are unlikely to invest in infrastructure if there is no possibility to improve the "competitive edge" of clubs. Assuming there is a positive correlation between sporting results and attendance, "*if teams cannot improve by spending money on their on-field product then investment in infrastructure, most obviously stadium capacity, will not make a return in the long term".* [36] Hence, there are concerns that investment in infrastructure might only result in more indebtedness for small teams.

Thus, with respect to Financial Fair Play, it has seemingly become more difficult for smaller clubs to "shorten the gap" with larger clubs. FFP creates financial conservatism in football as well as high risk of stagnation for smaller clubs, or clubs who play in smaller domestic markets where money retribution from media is quite modest. This outcome, undoubtedly, is the reason why none of the larger-market clubs were against the introduction of the Financial Fair Play. Viewed from this angle, FFP does not seem to be so "fair" at every level. Fairness is promoted in the sense that teams who do not overspend will not be disadvantaged in comparison to teams who finance themselves with loans. However, FFP does not promote a more equal distribution of wealth among clubs. Instead, it locks in a rigid hierarchy of teams in leagues and, therefore, does not resolve the competitive balance issue.

[35] (Touchot, 2014)

[36] (FLETCHER, 2010), The Fairness of UEFA Financial Fair Play Rules

4. Football of Tomorrow – What solutions for improving CB in European football

As explained in the previous section, the set of measures taken by UEFA in implementing FFP does not have the capacity to counter the deterioration of competitive balance (CB). We are, in fact, witnessing the emergence of *an elite group of clubs, resulting in lower interest for the sport and the fans.*[37] This is the reason why, in the second part of this paper, measures will be explored and tested, the adoption of which could lead to improved CB in European football.

Before continuing, however, the complex issue of governance in European football must be addressed. Football is operated in a multi-organizational environment, where UEFA is an administrative and executive body for all of the member leagues that are spread multi-nationally across Europe. UEFA's main role is to issue guidelines and promote the development of football as well as organizing European competitions. It has no mandate, however, with respect to the governance of national associations. UEFA requirements apply through its licensing system for clubs participating in the European competitions and any measures enforced by UEFA will benefit CB within European competitions only. For example, competitive balance in the Spanish league can only be regulated by the Spanish national football association, and the same applies for all other member national football associations within Europe. Therefore, in order to address the competitive balance issue in European football, measures have to be taken on two levels, national and international.

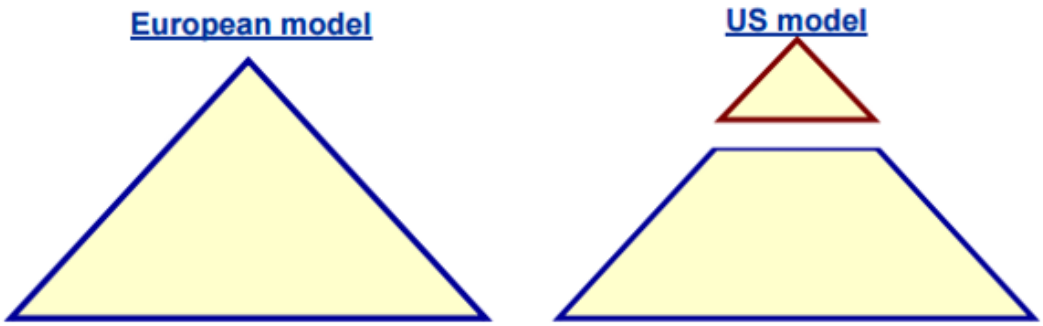
This is a problem which does not exist in the North American sports model, where leagues are closed and league management is controlled by the voting rights of club owners. Furthermore, closed leagues require more regulation in order to promote CB[38], this is why the American courts do not consider sports as an activity which has to be regulated by the traditional laws of competition. Therefore, most of the tools available to promote CB can be found in North American sports leagues' models. As a result, North American sports leagues have trended towards "socialist" models, where gate revenues are shared, TV revenues are equally distributed and salaries are capped. For the fans, this results in a hyper competitive environment where "smaller-market" as well as "larger-market" clubs can successfully co-exist and compete on more even terms.

[37] (Helde, 2014), A legal and economic analysis of UEFA's Financial Fair Play Regulations's effect on the competition in European football

[38] (ANDREFF, 2000), The Evolving European Model of Professional Sports Finance

In addition, in comparing American and European Sports governance, one can observe that in America, the management of professional sports and amateur sport is separated. In Europe, however, the same associations are responsible for regulating both amateur and professional sports alike, including football.[39]

Figure 10 - Difference between European & American models of sport



Model	National league model in Europe	North American
League	open	Closed
Teams	Win maximizer	Profit maximizer
Labor market	Deregulated	Very regulated (salary cap)
TV revenues	Pay per view & Performance	Equally shared
Team's mobility	Vertical (promotion & relegation)	Horizontal Can change of city (franchise system)
Competition format	Championship	Playoff
Antitrust laws	Subject to Antitrust laws	Exclusion from the antitrust laws
Revenue sharing	No revenue sharing	Gate sharing
Governance	Umbrella system, UEFA->national leagues->teams	League controlled by the teams

Leagues in European sport are considered "open" because at the end of competitive seasons, teams ranking at the bottom positions can be relegated to inferior divisions or leagues and teams that finish at the top rankings in inferior divisions or leagues can be promoted to the next higher level division or league. This is in contrast with the American model, whereby the franchises (clubs) within a league remain in the same league year after year. Another difference is that American franchises can obtain approval (by a vote of all teams in their leagues) to move to another city if the market is more appealing financially (i.e., in terms of number of fans, etc.). This "horizontal mobility" of the American model does not exist in the European sports model.

[39] (UEFA, Vision Europe UEFA, 2005)

The objectives of team owners are also different in America than Europe. American club owners are typically successful businessmen who have built their careers and wealth by learning how to maximize revenue. Within that scope, all revenues are shared and salaries are capped, thereby leaving teams having to manage their operations with minimum margin between revenues and expenses. In European football, however, there is very little financial constraint imposed on clubs which creates “bidding wars” among clubs, all of whom want to sign the best players. With sporting results being the ultimate goal and often, “at any price”, as a result more and more clubs become indebted beyond their means or must rely on wealthy donors to survive.

Regulations in the American sports model are designed to promote an equilibrium among teams and to maintain a minimum competitive balance. But can the American recipe work for European football?

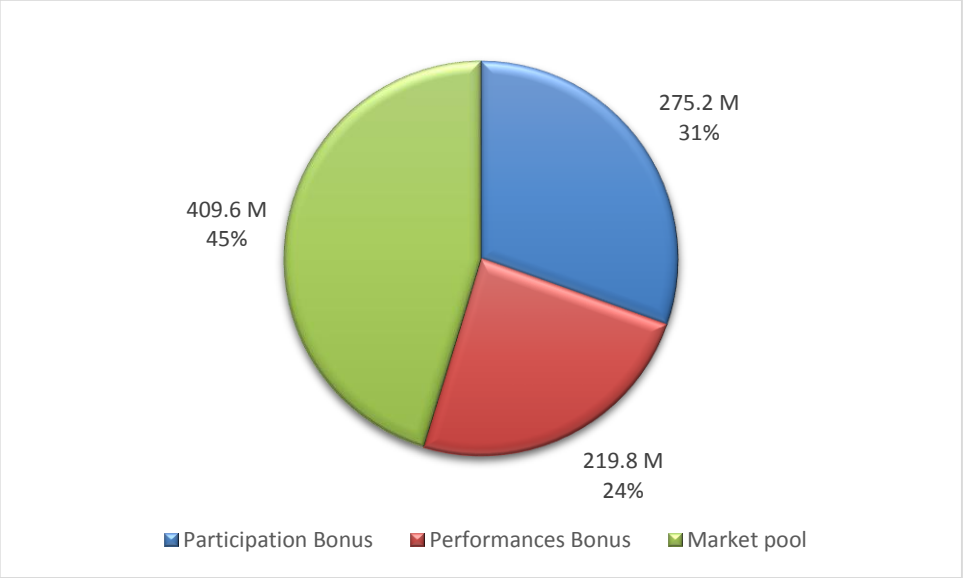
With respect to their consequences on competitive balance, the following recommendations are going to be tested in the following chapters:

- Equal distribution of TV revenue from the UEFA Champions League
- Implementation of a soft salary cap system in the English Premier League
- Gate revenue sharing
- Changing European leagues competition formats
- Minimum of “home-grown” players on a team

5. Distribution of earnings from the Champions League

In many domestic football leagues, the races for league titles are often sealed well in advance of the end of the season. Hence, most of the suspense lies in fierce battles for the Champions League (CL) qualifying placements. At stake is the prestige of playing against the elite of football, as well as the accompanying international exposure and, of course, the financial perks. In 2013/14, UEFA redistributed €904 million to the thirty two clubs which participated in the competition, amounting to an average of €28 million per team.[40] Each team received a participation bonus of €8.6 million which represented 31% of the total amount. Another 24% was shared according to one's performances, which are called performance bonuses. As an example, in the group stage, a win is worth €1 million and a draw €500 thousand. Consequently, the prize money gradually increased with each stage of the competition. Of the remaining 45% or €409 million, this was distributed according to the TV market pool, and this is where controversy started.

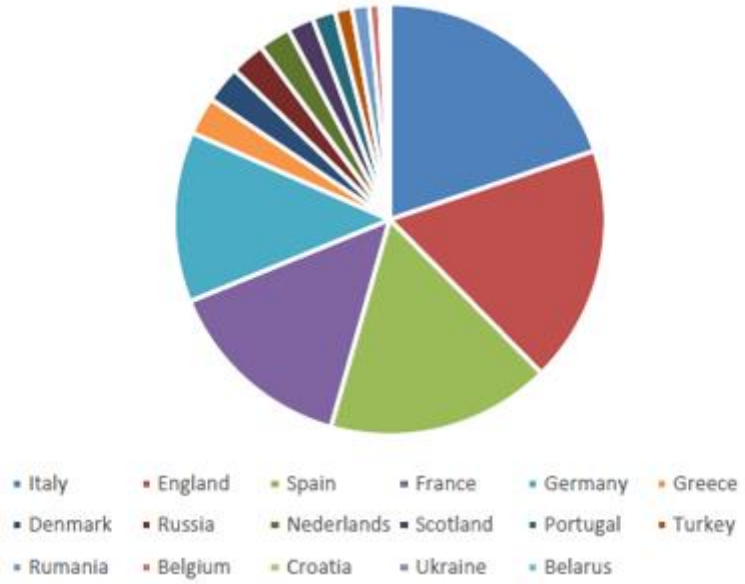
Figure 11 - Champions League revenue distribution



The market pool is not distributed in accordance with sporting merits, but instead according to the proportional contribution of one's national television market. Therefore, clubs from markets with large audiences receive more money than smaller-market clubs. As we can see on the graph below, 80% of the market pool goes to teams from the big five: France, Italy, England, Germany and Spain.

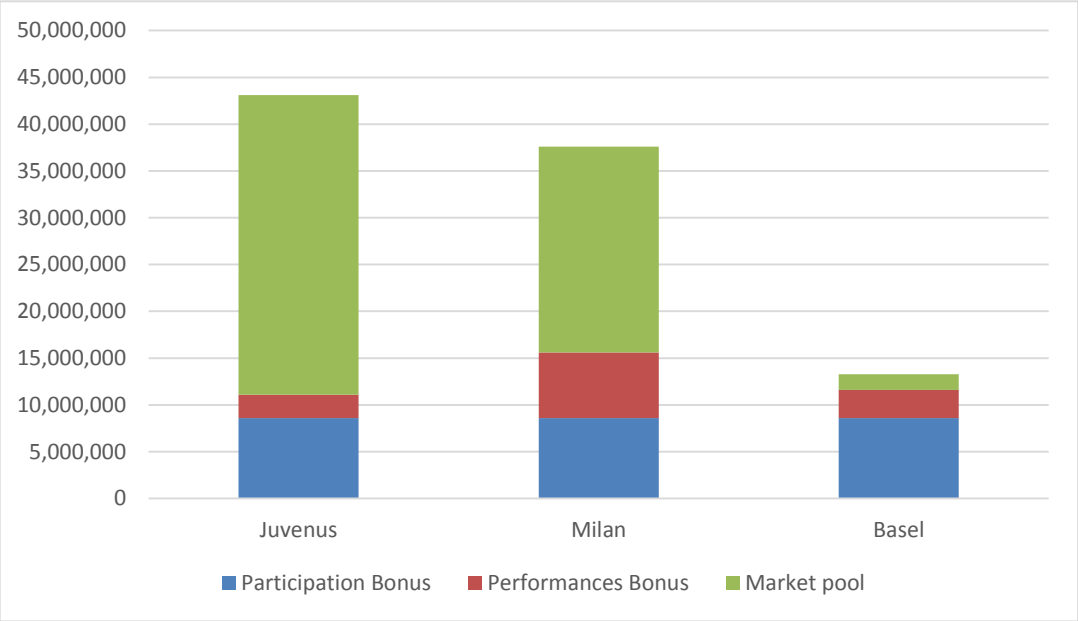
[40] (UEFA, UEFA Champions League and UEFA Europa League distribution to clubs, 2014)

Figure 12 - Market pool share by country – Source [41]



As an example, in 2013/14, both Juventus (Italy) and Basel (Switzerland) were not able to advance past the group stage, however, Basel managed to acquire more points than Juventus. Yet, in the end, Juventus accumulated €43 million of revenue from the CL and Basel only €13 million, almost three times less. This is a direct result of the market pool, which grants more revenues to teams from the big five.

Figure 13- 2013/14 revenue distribution Italian teams vs Basel



[41] (Helde, 2014), A legal and economic analysis of UEFA's Financial Fair Play Regulations's effect on the competition in European football, page 87

On the same chart, one can also observe that Juventus received more money than Milan, despite the fact that Milan qualified for the round of 16 and Juventus did not. This difference can also be explained by the fact that Juventus was the Italian champion that year. In addition, the title holder receives a larger share than other teams from the same country.

Therefore, in order to receive maximum revenue, a club needs to be a member of one of the big five countries, advance as far as possible in the tournament and hope for early elimination of its domestic rivals. Also, this revenue model emphasizes the virtuous cycle theory, whereby a team who wins receives more financial support and thus has more money to recruit the best talent for the future. In summary, after all is said and done, this team is more likely to continue winning than the other less fortunate clubs.

Clubs from the big five already have the advantage of receiving more money from their home markets, so why should they also benefit from larger revenues for equal sporting merits on a European scale? This practice, of course, emphasizes financial polarization among the other European leagues and has a negative impact as well on CB. However, what would be the consequences of revenue distribution without the market pool for the CL?

5.1 Possible scenarios

The first concern would be to evaluate how to share the €409 million from the market pool. There are three possible options. In the both of the first two options, the money from the market pool is either included in the participation bonus or the performance result. In the third option, the money is proportionally distributed between the participation bonus and the performance bonus. What would be the consequences of each option? Which one would be the most appropriate?

	Participation bonus	Performance result	Market Pool	Total
Current model	275.2 M (30%)	224.8 M (25%)	409.6 M (45%)	904.6 M
Option 1	684.8 M (75%)	224.8 M (25%)	-	904.6 M
Option 2	275.2 M (30 %)	629.4 M (70%)	-	904.6 M
Option 3	520.9 M (57.5%)	383.6 M (42.5%)	-	904.6 M

In order to compare each option, a new revenue distribution model hypothesis is run and is based on the revenue for each team in the CL 2013/14.

5.1.1.1 Tools for data analyzing

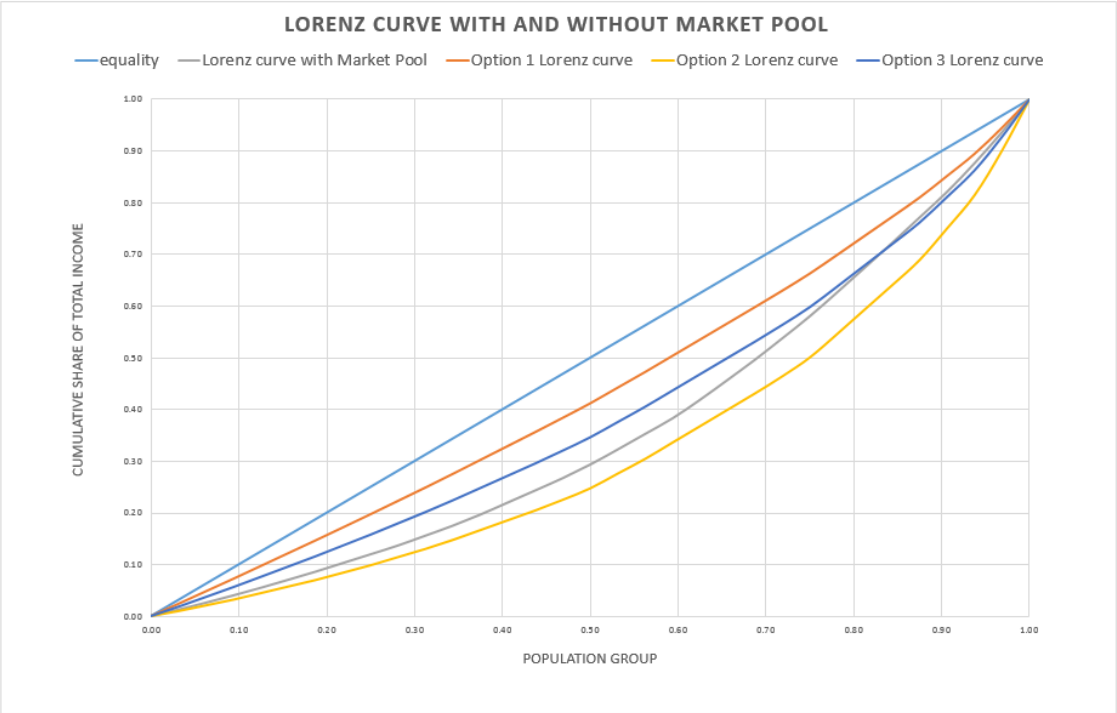
To analyze the data results, statistical tools such as the GINI index and the Lorenz curve are used. The Gini index is one of the most ubiquitous tools to calculate inequalities of revenue in sample populations. The closest to 0 the value of the Gini index is, the fairer is the revenue distribution.

With respect to the Lorenz curve, it shows the cumulative wealth for each group under the equality line that represent a perfectly even revenue distribution among the population. The bigger the area under the Equality line, the more unfair is the distribution.

The Lorenz curve will also allow for comparisons of the changes in distribution for the richest and the poorest, from one model to the other. Refer to the appendix for complete calculations and figures for all clubs and their revenues.

5.2 Which option?

Figure 14 - Lorenz curve for the 3 options



Option 1 : Participation bonus 70% - Performances bonus 25% (of revenue)

- **Gini index :** 0.12 smallest one->most balanced distribution
- **Lorenz curve :** 0.06 smallest area
- **Minimum amount per team :** € 21.4 million

In this option, the money from the market pool would be used for the participation bonus[42] and each club would receive, at least, €21.4 million. In addition, the orange Lorenz curve which represents this option, is the closest to the equality line which means that it is the most fair in terms of revenue distribution.

This system, however, could have disrupting effects on domestic league CB because the extra revenues could widen the financial gap in smaller domestic leagues. In other words, by narrowing the financial gap on a European basis, UEFA would create more inequalities in other leagues. For example, in Switzerland, where the total revenue from TV broadcasting amounts to €23 million,[43] the team winning the championship and participating in the CL, would develop a particularly strong competitive edge compared to the other teams of the Swiss championships. So, the Swiss team participating in the Champion's League would receive €21 million, more than all the other Swiss teams combined. And, the only way for smaller teams to catch up would be to try to create a virtuous cycle (i.e., investing and hoping for successful sporting results). Therefore, by improving the CB in its competition, UEFA would worsen CB in the national championships.

Also, this option would be highly unfavorable for teams from the big five. The risk would be that these teams may decide to break away from the UEFA system and create their own competition and this is a scenario that UEFA wants to avoid at all cost.

Option 2 : Participation bonus 30% - Performances bonus 70% (of revenue)

- **Gini index :** 0.35 biggest ratio ->least equal
- **Lorenz curve :** 0.17 biggest area ->least equal
- **Minimum amount per team :** € 8.6 million

[42] The minimum amount that every team which qualify for the champions group stage get

[43] (Alyce, 2014), http://www.ecofoot.fr/finances-super-league-suisse/

This second option would emphasize sporting merits, since all money from the market pool would be included in the performance bonus. The minimum amount distributed per club amounts to €8.6 million, the lowest of the three options. Thus, this is the model that would create the most inequalities, the highest Gini index, and the Lorenz curve with the largest area.

On the other end of the spectrum, there are some teams which would benefit from this system, such as the winner of the 2013/2014 CL edition, who would earn €90 million instead of €50 million. Also, teams from smaller TV markets who usually perform well, such as Portuguese teams or the Ukrainian side of Shaktar Donetsk, would benefit from this option. Indeed, these teams often pass the group stage of the UEFA Champion's League and are able to compete with other teams from the big five. By allocating to them the same money as other teams from larger markets, these teams would be able to retain their talent and develop and become even more competitive in future years.

Clubs from the big five with poor performances would be the losers. In the example of Olympique de Marseille, which did not score any points in the group phase would earn €8.6 million instead of €32 million. (See the appendix for all the financial consequences of each option for every team).

Option 3 : Participation bonus 57.5% - Performances bonus 42.5% (of revenue)

- **Gini index :** 0.21
- **Lorenz curve :** 0.10
- **Minimum amount per team :** € 16 million

The money from the market pool would be shared between participation bonus and performances bonus. The Gini index of 0.21 (compared to 0.27 for the current model), the gap between the poorest and the richest would narrow. Also, as can be observed on the Lorenz curve, there is a point at which the blue line crosses the grey line. This means that 20% of teams with the best results would receive even more money under this option. An example here is Real Madrid, the winner of the 2013/14 edition who would have earned €65 million instead of €57 million.

As in the second option, the clubs who would lose the most would be those from the big five who did not perform well. Conversely, teams from smaller markets with good performances would be benefit from this option.

5.2.1 Data analysis

Since there is a positive relationship between financial means and sporting results. A distribution model that narrow the financial gap between teams would benefit CB. Thus by dropping the market pool, UEFA could develop better CB in its competition.

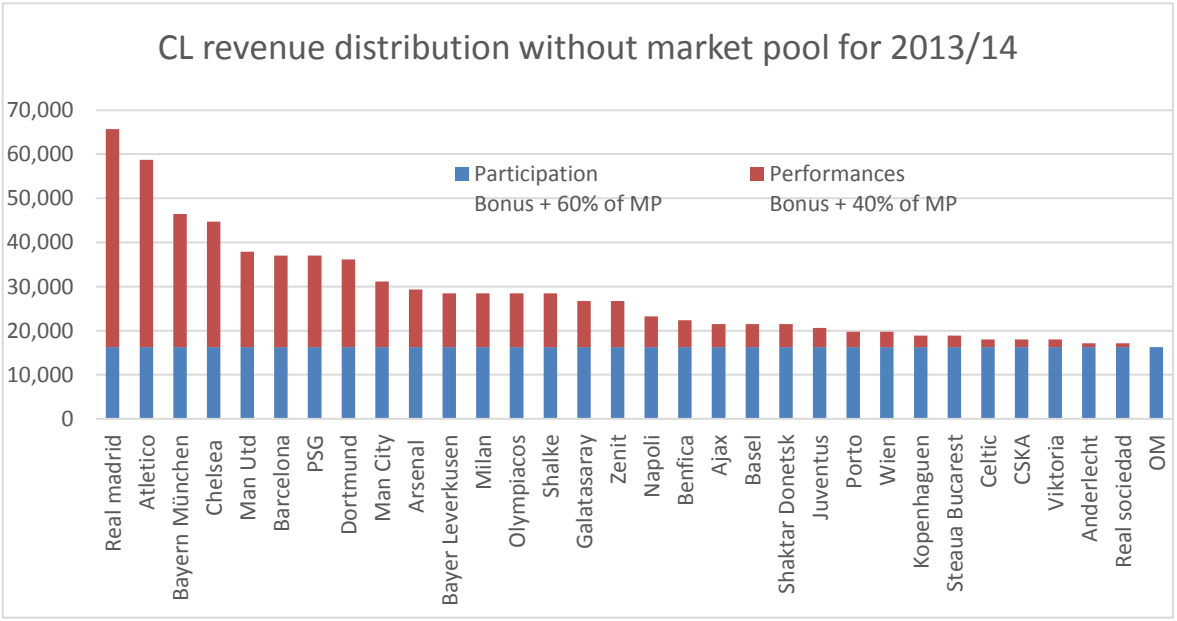
The model recommended is the 3rd option, as the 1st option would go against the interest of too many powerful stakeholders, mainly the biggest Europeans teams. Top teams might not be willing to participate in the Champions League anymore, and break-away, creating their own European competition

Option 2 which recompense only performances is not recommended. The Champions League is partly a knock out competition, and a defeat at some stage of the competition could have dramatic consequences for the finance of some teams. Moreover, the fact that so much money is at stake during a game would encourage some teams to play for defensively to protect a result. Which could hurt the show for the fan.

Therefore a model where the money from market pool is both used in the participating bonus and performance bonus is the most recommended. Teams which access to the quarter final would still earn as much money as before, therefore top teams would not be against the measure. In addition, the distribution of wealth would be much more even, and sporting result would have more impact on team's revenues.

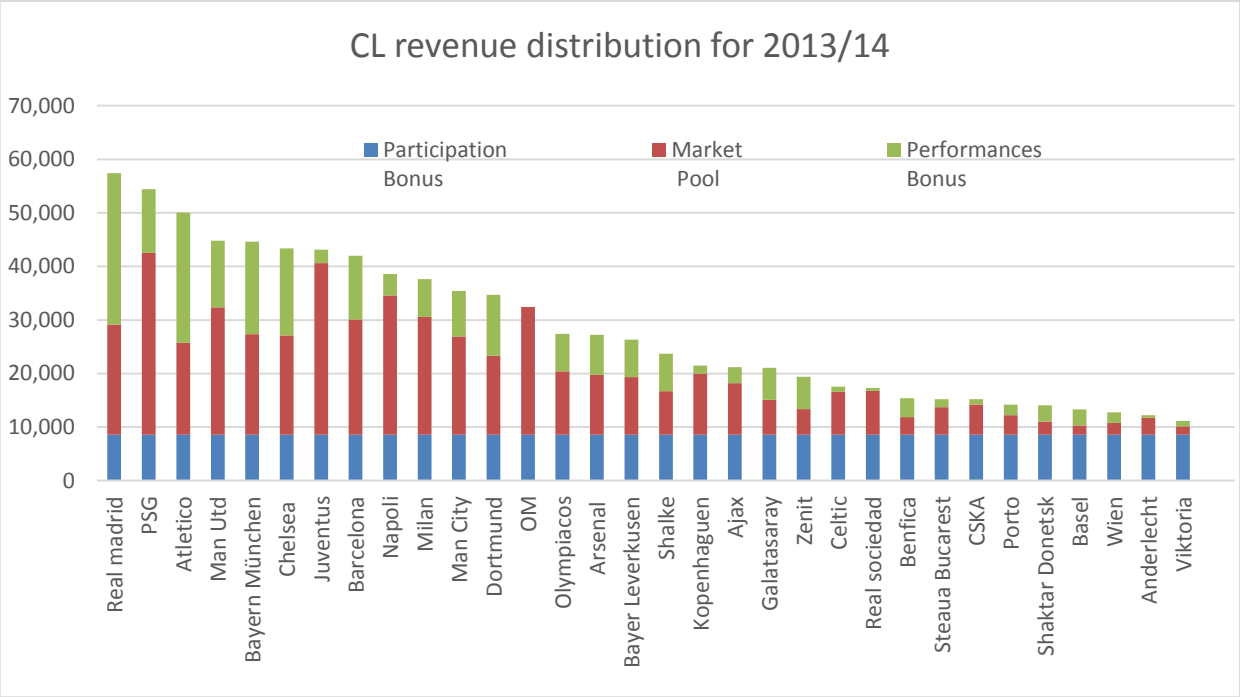
The figure below shows how the revenue distribution in the Champions League would look like with the option 3, without market pool.

Figure 15 - CL revenue distribution without market pool



The following represent the old model, with market pool where the money was mainly distributed depending on one's country TV market importance

Figure 16 - CL revenue distribution with market pool



In a model without market pool, the minimum earnings goes from €11 million to €16 million. Teams from the big5 with poor European performances like Juventus and Marseille would be the biggest losers.

A model without market pool would improve the general wealth of teams from smaller market. Thus reducing the financial power gap and improving competitive balance. Performances would be emphasised and competitive balance improved. However, as the teams with best performances would earn just as much before. The introduction of the measures could be possible since most stakeholders would benefit from the system.

Consequently, a new distribution model would make some teams more dominant in their home markets, such as Basel in Switzerland, which, thanks to the revenue of the Champions League, can easily stay at the top of the league every year. In order to counter this phenomenon, another financial restriction such as a salary cap would have to be enforced in order to safeguard domestic competitive balance.

6. Salary Cap

A salary cap is a financial instrument that limits clubs payroll. By creating economic constraints on teams, a salary cap model promotes competitive balance within a league.[44]

There are 2 main types of salary cap (SC), the soft salary cap, where the cap can be exceeded by paying a luxury tax. And the hard cap which cannot be exceeded.

There are also other variables that can be changed, such as whether the salary cap (SC) is a fixed amount for every team (absolute cap), or the SC is % of the total revenue (relative SC) [37]. In addition, there can be a salary cap on the entire team salary (team SC) or on the salary of one single athlete (individual SC).

Therefore, every sport has its own tailor made SC, depending on the needs for regulation. For the American sports league, here is a quick summary of the kind of SC introduced for each sports.

American sports leagues	Salary cap system	Threshold
National basketball association	Soft SC with a luxury tax and redistribution	fixed
National hockey league	Hard SC	fixed
National football league	Hard SC	fixed
Major league baseball	Competitive Balance Tax	fixed
Major league soccer	Hard SC	fixed

We can see that Basketball and Baseball are the only leagues without a hard SC. Baseball's competitive tax is not called a SC but it technically is actually, since it sets a threshold of maximum payroll that teams can exceed by paying a tax.

6.1 What SC model for a European football league?

European football is a very fragmented market and the actual revenue variation between teams is such that the introduction of a hard salary cap does not seem an appropriate tool. Indeed, if a salary cap system was to be applied, top teams would have to share up to 2/3 of their revenues. The introduction of a hard salary cap would prevent these teams from respecting their contractual commitments towards players and sponsors. Therefore, we will focus on a soft SC system.

Concerning Individual SC, I would like to mention the research of Stefan Késenne, an eminent professor in economics of sport who has proven with empirical data, the positive

correlation between SC and CB.[44] However, his research also underlines the negative effect of an individual salary cap on CB, indeed if a top player's salary is set under market equilibrium, it will create "excess demand on the player labor market". In this situation, top players will prefer playing for "richest teams, as they can provide more fringe benefits and greater exposure". Thus, individual SC would create more competitive imbalance within a league. For this reason, we will not consider an individual SC

A soft SC or competitive balance tax on the overall payroll is actually quite similar to the UEFA FFP. However, UEFA FFP's threshold is not set by a fixed amount, but rather adapts to the financial characteristics of each teams. Whereas in North American sports league, SC is always an absolute amount.

First of all, we will be looking at the payroll rules in NBA, which uses the luxury tax model. Consequently, we will discuss the possibility of implementing a soft SC system in European football inspired on the NBA model, and what the consequences would be if implemented.

6.2 Salary cap in NBA – case study

The national basketball association (NBA) is regulated under a collective bargaining agreement (CBA). The CBA is a contract between the 30 NBA franchises and the association of players. It includes a salary cap as well as a salary floor, the rules for trades, the procedures for the NBA drafts and all other details necessary for an NBA game to take place. [45]

The salary cap in the NBA is considered as soft cap, because teams are allowed to outspend under the condition that a "luxury tax" must be paid. It is the re-negotiation of the CBA, during the season 2010-2011, which lead to the lockout, when players refused to play. The issue was that franchise owners wanted to introduce a hard salary cap instead of a soft salary cap. The association of players was against this measure and started a strike, because it would have had a downward effect on their salary. On the contrary it would have had a positive effect on clubs owners' revenues.[37] As a compromise, both parties agreed on the introduction of a luxury tax.

The implementation was gradual, the first year for each dollar overspent, one dollar in tax had to be paid. But today the tax penalty is much higher and depends on the amount

[44] (Késenne S. , 2003)

[45] (Coon, 2015)

overspent and whether or not a team is a “repeat offender”.[45] Basically, the luxury tax does not forbid teams to overspend, but the cost of overspending becomes very high. As the tax rate increase exponentially, teams willing to overspend have to pay huge amount for the luxury tax. And the more tax is paid, the more money other teams receive, contributing to the general financial equilibrium of the league. The table below shows the different tax rates applied in function of the amount overspend above the salary cap which is $63 million for the season 2014/15.

Figure 17- Luxury tax rates in NBA- Source[45]

Team salary above tax level		Non-repeater		Repeater	
Lower	**Upper**	**Tax rate**	**Incremental maximum**	**Tax rate**	**Incremental maximum**
$0	$4,999,999	$1.50	$7.5 million	$2.50	$12.5 million
$5,000,000	$9,999,999	$1.75	$8.75 million	$2.75	$13.75 million
$10,000,000	$14,999,999	$2.50	$12.5 million	$3.50	$17.5 million
$15,000,000	$19,999,999	$3.25	$16.25 million	$4.25	$21.25 million
$20,000,000	N/A	$3.75, and increasing $.50 for each additional $5 million.	N/A	$4.75, and increasing $.50 for each additional $5 million.	N/A

In 2013-2014, the total of financial penalties amounted 71 million, the Lakers, the Heat, and the Knicks and the Nets being the team who contributed the most to the luxury tax. 50% of the money from the luxury tax goes to teams which don’t pay taxes, the other 50% mainly goes to the revenue sharing program of the league.[45]

As revenue increases gradually, the SC in NBA also rise over the years, in the last 10 years the tax was raised by almost $20 million, reaching $63 million for the season 2014/15[46]. Because the revenues of teams from bigger cities raise more rapidly than teams from smaller markets, the salary floor put smaller teams in an unsustainable situation. A parallel can be made here with European football, where even though there is no salary floor, smaller teams have been put at disadvantage because of the fast rise in salaries, leading to unequal distribution of talents amongst European leagues.

Nevertheless, in order to counter this effect, the NBA has introduced a revenue sharing program which works as follow:

1. All teams are required to contribute 55.8% of their revenues to a common pool.
2. 50% of this pool is equally distributed amongst all teams
3. The remaining 50% is only distributed amongst team who did not infringe the SC rules.

[46] (realgm, s.d.)

It is quite a paradox to see that in the United States, one of the most liberal country in the world, sports is run in a socialist manner. But thanks to these measures, 2/3 of the NBA franchises were profitable in 2013/2014. And in terms of CB, alike all American sports leagues, NBA seems to provide a better CB than European football.[47]

Several aspects of the NBA SC could be introduced in Europe, including the luxury tax, which would allow team to overspend by paying a penalty. The equal distribution of the money from penalties would also make sense in Europe, as it would narrow the financial gap between small and big teams. The gradual implementation is essential in order to successfully implement a new rule.

However, different rate depending on the amount and whether or not the team is a repeat offender, might be impossible to apply in Europe. The distribution of revenues is very unequal, therefore some teams would have to pay too much and would have incentives to quit the league.

6.3 Implementing a soft salary cap in the English Premier League

As mentioned in the "competitive balance change" part, there is a clear correlation between points and sporting results in the Premier league, as in all others leagues.

Therefore what would be the consequences of a SC on competitive balance? In order to answer the question, we are going to test a model of salary cap in the Premier league.

But first, the constraints of implementing a SC must be addressed. What kind of threshold? Would a relative SC (% of spending according to revenue) or absolute (fixed amount) SC be better?

A relative percentage of total revenue

Example, the payroll must not exceed 70% of total revenue.

- **Pros :** This cap adapts to each teams capabilities. Easy to implement in a league with unequal distribution of wealth
- **Cons :** This measure is actually similar to the FFP. The effects on CB are very limited

Absolute amount based on average payroll with luxury tax

[47] (82games.com, s.d.)

- **Pros :** This measure definitely has a positive impact on CB, as we have seen in the NBA case study. If the money from the luxury tax is redistributed, it narrows the financial gap.
- **Cons :** If only one league introduce this system, teams from other leagues would have a competitive disadvantage in European cups such as the Champions League. Also, national football associations have an interest in their teams to perform well in European competitions. Indeed, the number of European qualification places for each country is set by the UEFA coefficient system, which is an index reflecting the performance of the club who participated in European competitions in the last 5 years. The better teams from a country perform, the more European cup qualifications places a league will have. Therefore an asymmetric introduction of an absolute SC in the different European domestic league would create unfairness between the different leagues.

Relative amount based on a ratio between the lowest payroll and highest payroll

Example, a ratio of 3:1 between the team with the highest payroll and lowest payroll has to be respected. It the threshold is exceeded, a luxury tax has to be paid

- **Pros :** Allow the league to keep financial disparities within a certain limit
- **Cons :** The SC would depend on the team with the lowest payroll, in open league with promotion and relegation, the budget of the poorest team can vary. Thus it is an unstable system.

6.3.1 Relative or absolute salary cap for the English Premier League?

A SC based on a relative % of revenue unfortunately have too little impact on CB, therefore we will not consider it. The payroll ratio is excellent for CB but the stability is poor due to the promotion and relegation system. The SC based on the average payroll of the league seems the most adapted, it has a positive effect on CB and offers more stability than the payroll ratio.

Model	Effect on CB	Implementation difficulty	Stability
Percentage of revenues	low	easy	high
Average payroll of the league	high	moderate	high
Payroll ratio	high	moderate	low

Key success factors for implementing a SC in English Premier League?

- Teams shall not pay more luxury tax than the money they receive from the league, otherwise they might have an incentive to quit the league
- To have a positive impact on CB, money from luxury taxes fines shall be distributed evenly amongst all teams
- Implementation has to be gradual. A period of adaptation has to be given to teams.

- Keep the FFP rules, to counter indebtedness risk.

6.3.2 Information and rules for the salary cap model tested in the English Premier League

- Teams who participate in the Premier league 2013/14
- The SC threshold is set by doing the mean of all team's wages participating in the Champions League. Salary cap = £83 million
- Source for wages : http://www.financialfairplay.co.uk/latest-news/wage-spend-versus-points-achieved
- **The implementation of the SC is gradual.** 3 years before the SC is put in place. The tax represents 40% of total overspent for the first years. The percentage could change for the following years depending on the results
- Equal redistribution amongst team
- We assume that teams are win maximizers and that they would spend all the money collected from the luxury tax new/better players, thus increasing their wages
- No individual salary cap
- The total payroll must not exceed 80% of the total revenue. Sanctions as per the FFP (financial penalty or sports sanctions)

6.3.3 Results

The following table shows the result of a soft SC for the season 2013/14, based on the average payroll, with luxury tax and equal redistribution of the money from the penalties.

2013/2014	Season payroll (£million)	Luxury tax year (40% of excess wages)	New wages (£million) after luxury tax
MANCHESTER CITY	196	56,33	151
MANCHESTER UNITED	185	50,83	145
CHELSEA	176	46,33	141
ARSENAL	160	38,33	133
LIVERPOOL	126	21,33	116
TOTTENHAM HOTSPUR	94	5,33	100
NEWCASTLE UNITED	68	0,00	79
SUNDERLAND	66	0,00	77
ASTON VILLA	63	0,00	74
EVERTON	63	0,00	74
FULHAM	56	0,00	67
STOKE CITY	53	0,00	64
WEST BROMWICH ALBION	52	0,00	63
WEST HAM UNITED	52	0,00	63
SOUTHAMPTON	47	0,00	58
NORWICH CITY	45	0,00	56
SWANSEA CITY	45	0,00	56
CARDIFF CITY	43	0,00	54
HULL CITY	42	0,00	53
CRYSTAL PALACE	35	0,00	46
Total wages	**1667,000**	**218,450**	**1667,000**
Average wage per team	**83,350**	**7,282**	**83,350**
Highest-Lowest ratio	**5,600**		**3,279**
Gini index	**0,627**		**0,508**

Only 6 teams out of 20 would pay a luxury tax, they would clearly be the losers, if a SC was to be introduced.

If we assume that all teams are win maximizers, the CB would be improved, since they would reinvest the money from the luxury tax in acquiring new talents.

Even though the gap is still enormous between the team which spends the most and the one which spends the less, the ratio went from 5:1 to 3:1. Also, the Gini index indicates that there is of course a better distribution of wealth thanks to the SC.

Concerning the tax rate, it has been set at 40%, assuming that this is the first year. It would be increased in the following year. But, the rate does not have to be set too high, so that the richest teams don’t break away from the league and create a parallel one.

But is it really in the advantage of the league to apply a SC rule? The best teams participate in the Champions League and represent the interest of England in Europe. Thus, the league might have an incentive to favour them. We can see that in 2014/15, English teams underperformed compared to other leagues. And if the trend would continue in the next years, they would lose a European qualifying seat, in favour of Italy. Therefore there is a real danger.

	Country	Select your association	10/11	11/12	12/13	13/14	14/15	Pts
1	Spain		18.214	20.857	17.714	23.000	18.357	98.142
2	England		18.357	15.250	16.428	16.785	13.571	80.391
3	Germany		15.666	15.250	17.928	14.714	15.571	79.129
4	Italy		11.571	11.357	14.416	14.166	18.166	69.676
5	Portugal		18.800	11.833	11.750	9.916	9.083	61.382
6	France		10.750	10.500	11.750	8.500	10.916	52.416
7	Russia		10.916	9.750	9.750	10.416	9.666	50.498
8	Ukraine		10.083	7.750	9.500	7.833	9.333	44.499
9	Netherlands		11.166	13.600	4.214	5.916	6.083	40.979
10	Belgium		4.600	10.100	6.500	6.400	9.600	37.200
11	Switzerland		5.900	6.000	8.375	7.200	6.900	34.375

In addition, depending on the league format (open or closed), a salary cap can have different effects. In an open league, the introduction of a salary cap will have an impact on the overall performances of teams which play each other in European competitions. Therefore, an asymmetric introduction of a salary cap in the different European leagues would contribute to competitive imbalance.

In the case of a closed league, teams do not compete with other teams from other championships; therefore the international competitive factor does not have to be taken into account.

As the economic situation differs from one league to another, the introduction of a common European salary cap is not possible. Therefore, the easiest way to implement a salary cap in European football would be in the case of a reunited league (breakaway league).

6.4 Gate revenue sharing

In North American leagues, gate revenue sharing (GRS) is a common practice. *"In American Football (NFL), 40% of gate revenues go to the away team. In major Baseball league, the league collects a fixed share of net local revenues and redistribute these revenues in a progressive manner such that team with lower revenues receive a greater part of the pool which is redistributed"*[48] As franchises from bigger cities get more revenues, GRS has become necessary to even the financial means of every teams.

In European football, gate revenue sharing used to be practiced until 1983, when it was abandoned[48]. But what would be the consequences of a GRS system in a European football league?

There has been numerous empirical research about GRS. And most of them contradict one another, based on 2 variables. Are team owner profit or win maximizers. And do the dominant teams come from a large or small market? In addition, these research do not take into account many other variables such as the difference in long term asset and liability. Sports economic models referred to in other chapters will therefore not be taken into account here

One of the main challenges in implementing this rule in a European league is directly linked with the legal constraint. In a legal system where sports is considered as a regular economic activity, revenue sharing could be considered as a breach of economic freedom.[49] American sports do not have to deal with this problem, as the American legal system has set provisions, ruling that sports is not a common economic activity, and that it should not be subject to the anti-trust laws.

In addition, most of American franchises regularly update their stadiums, which they are owner of. On the contrary, in Europe there are still many stadiums which are owned by cities, and the team pay a rent to the city. But some teams, recently invested a lot of money in stadium facilities, which are long term tangible assets that offer a stable return on investment over the years thanks to gate revenues and merchandising.

On the other hand, some teams prefer to invest in acquiring players. But player's value can change very quickly, depending on their age, injuries and performances. This is why players are considered as middle term intangible asset which are more risky due to their

[48] (Sergiy Butenko, 2010), Optimal Strategies in Sports Economics and Management

[49] (Helmut Dietl, 2010), Competitive balance and Revenue Sharing in Sports Leagues with Utility-Maximizing Teams

volatile value. It would be unfair for the teams which have invested and indebted themselves for improving facilities, to give up the revenues of their investment in favour of teams with a short term vision.

Therefore, if gate revenue sharing was applied, in the future it could refrain investment in long term asset, as teams shall have to share revenues from these investments.[50]

GRS is a valuable tool, which make sense in a closed league, where all teams are owner of their stadiums. But it seems difficult to apply such regulation in a league where there is still so much difference in long term asset investments.

6.5 Minimum of home grown-players in a team

In what has become a globalized European football labor market, one the main objective of UEFA is to foster youth training within clubs. The goal is to protect the interest of young players, give them a chance to play and develop all their potential. In this scope, they have introduced a quota of minimum home-grown players (HGP), to be named in the squad participating in the Champions League and Europa League. Starting from the season 2008/09, a minimum of 8 home-grown players must be integrated in a 25 man squad[51], so that teams have an incentive to foster young players.

But what is a home grown players for the UEFA?

"UEFA defines locally-trained or 'home-grown' players as those who, regardless of their nationality, have been trained by their club or by another club in the same national association for at least three years between the age of 15 and 21. Up to half of the locally-trained players must be from the club itself, with the others being either from the club itself or from other clubs in the same association."[51]

According to the UEFA, there are no constraints about the nationality of the players, because it would be considered as illegal under EU freedom of movement's laws (following the Bosman ruling). It means that teams can buy young foreign players, loan them to another club until they reach good level and transfer them back from the loans.

Concerning the legality of the rule, the EU has commissioned a pool of researchers to examine this quota rule. The research concludes:

[50] (Philips, 2008), Should european football adopt a revenue sharing scheme

[51] (UEFA, Protection of young players, 2014), http://www.uefa.com/news/newsid=943393.html

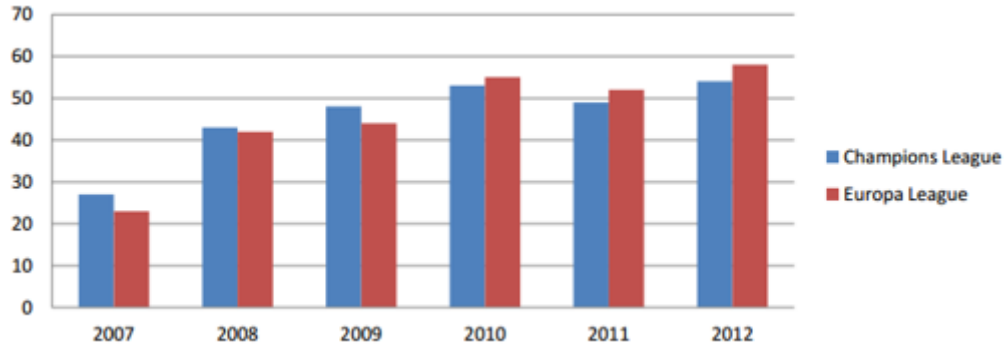
"The home grown player rule amounts to an indirectly discriminatory rule because even though the Rule is neutral in terms of nationality, national workers are placed at an advantage over migrant workers." [52]

But*, "An indirectly discriminatory measure that restricts a worker's free movement can be accepted in law only if it pursues a legitimate aim compatible with the Treaty and is justified by overriding reasons in the public interest. The justifications presented by UEFA in support of the rule, namely that it promotes competitive balance and encourages the training and development of young players, must be accepted as legitimate."*

Therefore, because it is not a directly discriminatory measure, and for the sake of competitive balance (CB), the home-grown players rule is not in breach of the EU freedom of movement. However, the same commission qualified the effect of the rule on CB as "very modest". In addition, the commission advances that there is little evidence of an improvement in youth development since the introduction of the rule.

Indeed, even though the number of home-grown players (HGP) has increased over the last years as per the (first chart), the size of the team named for the competition has also increased (second chart).

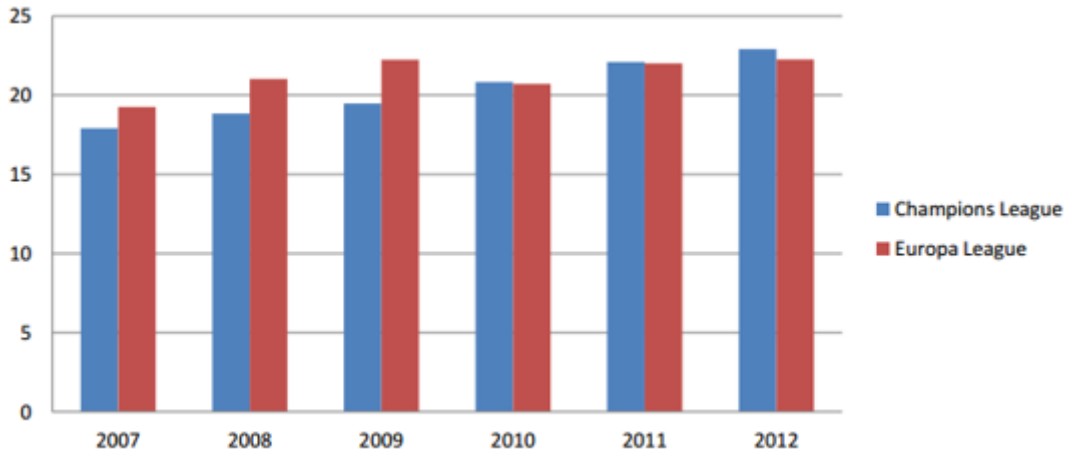
Figure 18- Proportion of home-grown players in squad list for UEFA competitions – Source [53]



[52] (Murray Dalziel, 2013), Study on the Assessment of UEFA's 'Home Grown Player Rule'

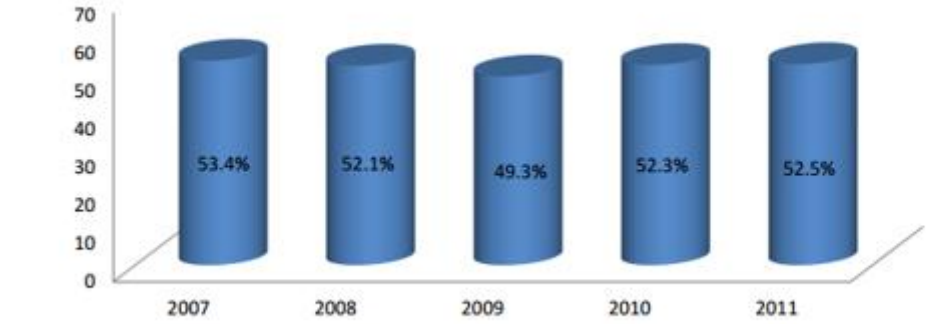
[53] (Murray Dalziel, 2013), Study on the Assessment of UEFA's 'Home Grown Player Rule'

Figure 19 - Average team size for teams in UEFA competitions - Source[54]



The third figures shows the average minutes played in UEFA competitions, and confirms the assumption that even though young players are called more often in the first team, they do not play more. As in fact, the average number of minutes for HGP is still the same since the introduction of the rule. So HGP, would actually just be integrated in the team in order to respect the rule.

Figure 20 - Proportion of minute played for HGP in UEFA group stage competitions - Source[54]



(Reproduced from UEFA 2012: 48).

Therefore, should UEFA go further in regulating and oblige teams to field a minimum of home-grown talents?

[54] (Murray Dalziel, 2013), Study on the Assessment of UEFA's 'Homegrown Player Rule'

6.5.1 Obligation to field at least 3 home-grown players

Would obligating teams to field home-grown players (HGP) help to increase CB? What can we learn from countries with such regulations?

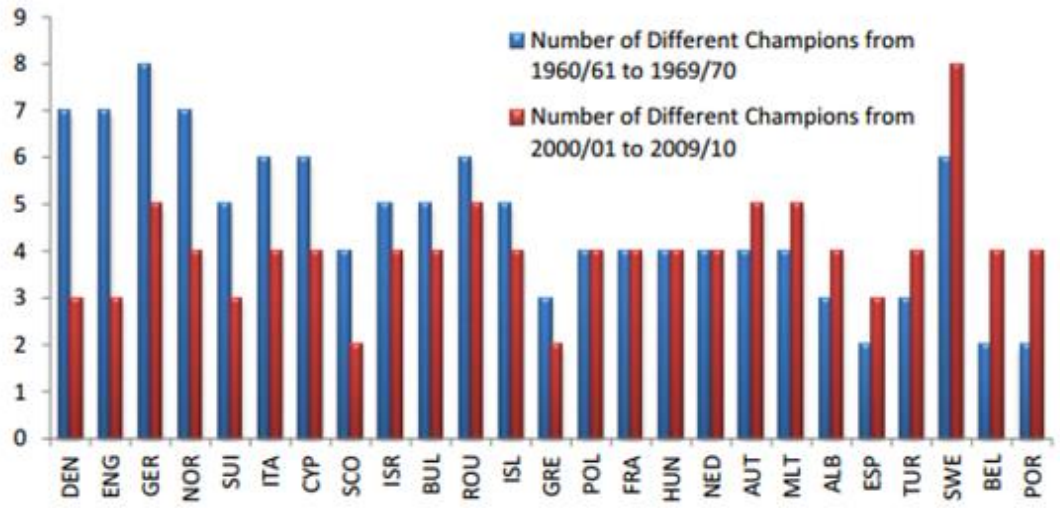
Only 3 countries from the EU have introduced rules that oblige teams to field a minimum of HGP on the score sheet.

- **Belgium**
  At least 8 HGP in the squad list
  At least 6 HGP on the score sheet
- **Finland**
  Half of the players from the squad list have to be HGP
  At least 4 HGP have to play in the match
- **Latvia**
  Only 5 non HGP can be on the field
- **Yugoslavia**
  At leas 3 HGP have to be field

The countries mentioned above are considered as small markets. In fact none of the big leagues have adopted a rule that would oblige teams to field home-grown players.

The example of Sweden is also interesting, as it is the country with the strictest rules, half of team has to be made up of HGP. And as a matter of fact, Sweden is one of the only country which has had an improvement on CB, based on the comparison in the total number of different domestic champion, post Bosman ruling.

Figure 21- Two decades comparison in the total of different domestic champions - Source[55]



[55] (Murray Dalziel, 2013), Study on the Assessment of UEFA's "Home grown Players rule"

In an interview to the daily mail, the French coach of Arsenal, Arsène Wenger, gave his opinion about a possible increase in the minimum quota of HGP from 8 to 12 in the premier league: [56]

"*That means as well that the rules of the game must be structured to favor the best. Or we are not in a competition anymore…So we can say one of two things - we protect the mediocre or we produce the best players."*

He consequently gives this interesting example.

"In Yugoslavia in the past they decided you had to play three players on the team sheet who were under 21. What happened? They became professional subs. It happened in France, too."…"Then they decided you had to play three players (aged) under 21 from the start. You know what happened? They subbed all three after five minutes."

Wenger's argument is coherent; he is not willing as a coach to leave the best players on the bench. And the best players of the Premier League should be playing.

But the sad reality is that today, only 35% of Premier leagues players are English, compared to 60% of Spanish players in Spain or 59% in Germany. Half of the 30 richest European teams are English, and thanks to this financial power, they can attract the best talents, contributing to competitive imbalance.

The introduction of stricter regulations for home-grown players involves some risks. Indeed, young players would have a more important role. So it is likely that teams will enter in a transfer war, to sign the best young players and integrate them in their academy. Even though, the FIFA has strict regulations concerning the transfer of young players, these are still possible. The latest example is the highly mediatized transfer of the 16 year old Norwegian talent, Odegaard to Real Madrid, for a fee of some 3M Euro.[57]

There seems to be pros and cons to the introduction of HGP minimum quota. It works in certain small markets such as Belgium, Sweden and Finland. But concerning major leagues, the introduction of HGP quota provides mixed results.

[56] (Dailymail, Arsene-Wenger-warns-home-grown-quota-damage-Premier-League., 2015) http://www.dailymail.co.uk/sport/football/article-3015480/Arsene-Wenger-warns-home-grown-quota-damage-Premier-League.html#ixzz3a0M851Ns

[57] (Dailymail, /Martin-Odegaard-signs-Real-Madrid, 2015)

6.6 Changing European leagues competition format

There are 2 main competitions formats in sports, competitions where everyone play against everyone and the one that have the most points at the end of the season is the champion. Or the knock out competition system where teams are drawn to play other teams, either randomly or in function of their performances. In a knock out competition, the team who loses the direct confrontation is eliminated.

In football, some of the competitions are based on the knock out format and some others on the classic championships points system. All domestic leagues are using the classic championship point system, but for international competitions, the knock out competition format is preferred. For example the wold cup or the Champion's League are knock out tournaments. And domestic leagues such as the English Premier League or the Italian Serie A have classics championships points system.

However, many other sports use another competition format for domestic leagues, the so-called playoffs. Where almost every teams still stand a chance of winning the league even until the very end of the season. Something which cannot happen in football, where it is often easy to guess between which teams the title is going to be played.

In North America, the playoff system is prevalent. But it is not only an American system, almost all European hockey leagues, including Switzerland have playoffs. There are pros and cons to the implementation of a playoff system. But in 2009, the Belgium Jupiler league "made the leap" and introduced a playoff system. What can we learn from the introduction of playoffs in the Belgian Jupiler league? Does playoffs increase competitive balance?

6.7 Jupiler league case study

Named after a famous multinational beer company, the Belgium league opted for a system of playoffs in 2009. The goal is to foster competitiveness amongst Belgian teams, and add more uncertainty to the championship. However, the system introduced is quite complex, and did not go without critics. It works as follow. The season is divided in 2 parts, a first part where the 16 teams play 2 times against each other. A second part, where 3 groups are created, according to the ranking of the first part of the season.

1st group • Half the points from the championship • 10 games in total
2nd group A • Teams ranking 7,9,11,13 • Points starts from 0 again • 6 games • The winner play against the winner of group 2 B for a place in Europa league **2nd group B** • Teams ranking 8,10,12,14 • Points starts from 0 again • 6 games • The winner play against the winner of group 2 A for a place in Europa league
3rd group • Teams ranking 15th and 16th play each other 5 times • The loser of the confrontation is relegated

The system resulted in actually some good outcomes for the league :

- TV revenues have increased by 60%[58]
- Belgium went from the 15th place in 2010 to the 10th place in 2015 in the UEFA leagues coefficient ranking
- Multiplication of games between top teams
- Revitalization of the middle table

The main critics were the following

- Too many games (40 instead of 32 before), thus difficult for the players who also play in national team. As it is difficult for teams who play European cups, they can play as much as 3 times a week.
- Only 1 team from the 2nd division can be promoted
- Too hard to understand
- Fans were reluctant to change. *"It can make for an exciting end to the season but it's not really football as it was meant to be."*[59] A Belgian fan
- Anderlecht won the last 3 championships

In regard to CB, playoffs provides mixed-results because even though there was more uncertainty of outcomes until the end of the season, the same team, Anderlecht, won 3 times in a row the championship. A Scottish research compared long term CB in the

[58] (Hypercube, 2009), http://www.hypercube.nl/en/cases/reforming-belgian-competition-2009/

[59] (belgofoot.be, 2012), http://www.belgofoot.be/the-jupiler-league-playoffs-all-you-ever-wanted-to-know/

Scottish league and the Belgian league, using the standard deviation of points.[60] The result shows almost no change in the standard deviation for Belgium from 2009 to 2012.[61] However, the research only analysed data for the first 30 games, without including the playoff period which has a unique form of uncertainty of outcomes. Indeed, in the last 2 seasons, the title race was still open until the last game.[62]

Concerning games attendance averages, it seems there are no major improvements if we compare the average attendance of 2008 and 2011.[63]

As a conclusion, we can see that changing of competition format in an environment where fans are very conservative and reluctant to change is difficult. In order to attract the public interest, a new model has to be simple and easy to understand by diehard fans as well as by people who watch a game once in while on TV.

Also a change in competition format can have several positive consequences. As the best teams play each other more often, there is more uncertainty of outcomes, which render the games more exciting. Every team, until the very end of the season, plays for something. In a 20 teams classical competition format, teams between the 14th rank and the 8th rank usually have nothing to win or to lose in the last quarter of the championships. This does not happen in competitions with playoffs.

6.8 Observations

Depending on one league uncertainty of outcomes, a playoff format might have different consequences. For example, in Spain, Italy or England where intra season CB is lower than in other leagues, a playoff format could increase the number of exciting games for fans. [22]

We have seen with the Belgium example, that playoff system means an adaption of the number of teams participating in the league. Except Germany, all big 5 leagues have 20 teams, in this condition a playoff system would be difficult to implement. Thus, the playoff system question the size of a market, a debate that every league must have in order to develop an optimum level of competitiveness and CB balance.

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[60] Standard deviation is a statistic tool which measure the variation around the average. Total number of point minus average -> squared (to have only positive results- >average of the square results

[61] (squareeye, 2011), http://clients.squareeye.net/uploads/sd/The_Fans_Plan_The_Problem.pdf

[62] (sport.be, s.d.)http://www.sport.be/fr/jupilerproleague/archief/fixture.html?comp=2728

[63] (billsportsmaps, 2013), http://billsportsmaps.com/?category_name=belgium

7. Breakaway leagues; is it a threat or opportunity for European football?

In Europe, there is a widespread idea that some teams have become too good and too strong for their domestic leagues. After having won 4 national titles in a row and being so dominant in Series A this year, Juventus barely celebrated winning the title, which fans now take almost for granted. However, whether it is in Italy with Juventus, Bayern München in Germany or the duopoly between Real Madrid and Barcelona in Spain, similar cases in point can be found across all European domestic leagues.

In this context, the idea of breakaway leagues is not only a fan's fantasy but is the result of several projects in the past. One of them is the Altantic league, a proposition to reunite the best Portuguese, Dutch, Belgian, Scottish and Scandinavian teams. The creation of such a league would raise TV revenue and enable these teams to finally have the means to compete with the big 5 leagues. However, UEFA does not support this proposition as they see the Atlantic league as a competitor to their own European clubs' competitions. In addition, the creation of the Atlantic league could pave the way to other reunified leagues, such as an Eastern Europe league, a Balkans league, a central Europe league or even a European Super League which could render UEFA competitions utterly obsolete. This is probably the main reason why UEFA is against the creation of the Atlantic league. [64]

7.1.1 European Super League

The idea of a European Super League is not new. This concept began in 1991, when an informal group called "media partners" was formed by Silvio Berlusconi (the owner of AC Milan and several private television networks in Italy). The lobbying group achieved the creation of the Champions League, a group phase tournament replacing the previous knock-out version called "European Champions Club's Cup".[65] The goal behind it was to enable the play of more European games in order to increase TV revenue.

In 1998, the G-14 was established; a group uniting the 14 strongest teams in the history of European football, where new members could only join on invitation. The goal of this lobbying group was to safeguard their interest on an international basis. One of the achievements of the G-14 was to get a bigger share of the TV revenue from the Champions League, originating in the creation of the market pool system where countries

[64] (Guardian, 2015), http://observer.theguardian.com/sport/story/0,6903,644267,00.html

[65] (Guardian, 2015), http://observer.theguardian.com/sport/story/0,6903,644267,00.html

from bigger TV markets get more money than others. In 2008, they achieved to get compensation from UEFA and FIFA for the selection of club players for the national teams. After this compromise in 2008, the G-14 agreed to disband and was replaced by the European Club Association which has 100 club members from all 53 European national associations. The motto of the European Club Association is “"LEADING THE WAY FOR FOOTBALL CLUBS IN EUROPE".[66] Their goal is, basically, to safeguard the interests of the clubs in European football matters.

For many football experts, the European Super League looks like the next inevitable step to what has become a global market.[67] But is horizontal integration a threat or an opportunity for European football?

On the paper, a European Super League seems like the perfect solution for everyone. Teams which now play a secondary role in their leagues might be able to take part in the title race. And, the best teams of the continent would play each other every week. We could imagine that the uncertainty of outcomes would increase and that fans would be content. [68]

However, the response of key stakeholders such as national leagues, UEFA, the clubs themselves, the media and more importantly the fans would be the key success factors to the creation of this league. The criteria would be as follows:

- Competition format
- Open or closed league?
- Governance?
- What regulatory instruments? (salary cap, revenue sharing)
- TV revenue sharing?

UEFA and the national leagues would be the main losers of the creation of a European Super League. Since the latter would directly replace UEFA competitions, it would be a big revenue shortfall for UEFA as well as for the domestic leagues which would generate less TV revenue.

[66] (ECA, about-eca, 2015), http://www.ecaeurope.com/about-eca/

[67] (is-a-european-super-league-an-inevitable-next-step-in-world-football, s.d.)

[68] (Pijetlovic, 2015), EU Sports Law and Breakaway Leagues in Football

In addition, most teams in Europe are century-old organizations; their history has been built around local rivalries which is part of Europe football culture. For local fans, it would definitely be a pity not to see these traditional local derbies (rivalries).

Also, some teams participating in the European Super League might not be as competitive as they used to be. Is it better to play for first place in your league or battle for the relegation competition in a European Super League?

In recent years, there were rumors about the creation of a European Super League to begin play in 2018. However, the president of the European Club Association, Karl-Heinz Rummenigge, addressed this question “"*Our European Super League is the UEFA Champions League! We are very happy with the current competitions and our extremely fruitful collaboration with UEFA. We will continue to work together with UEFA for this year and beyond 2018."* [69]

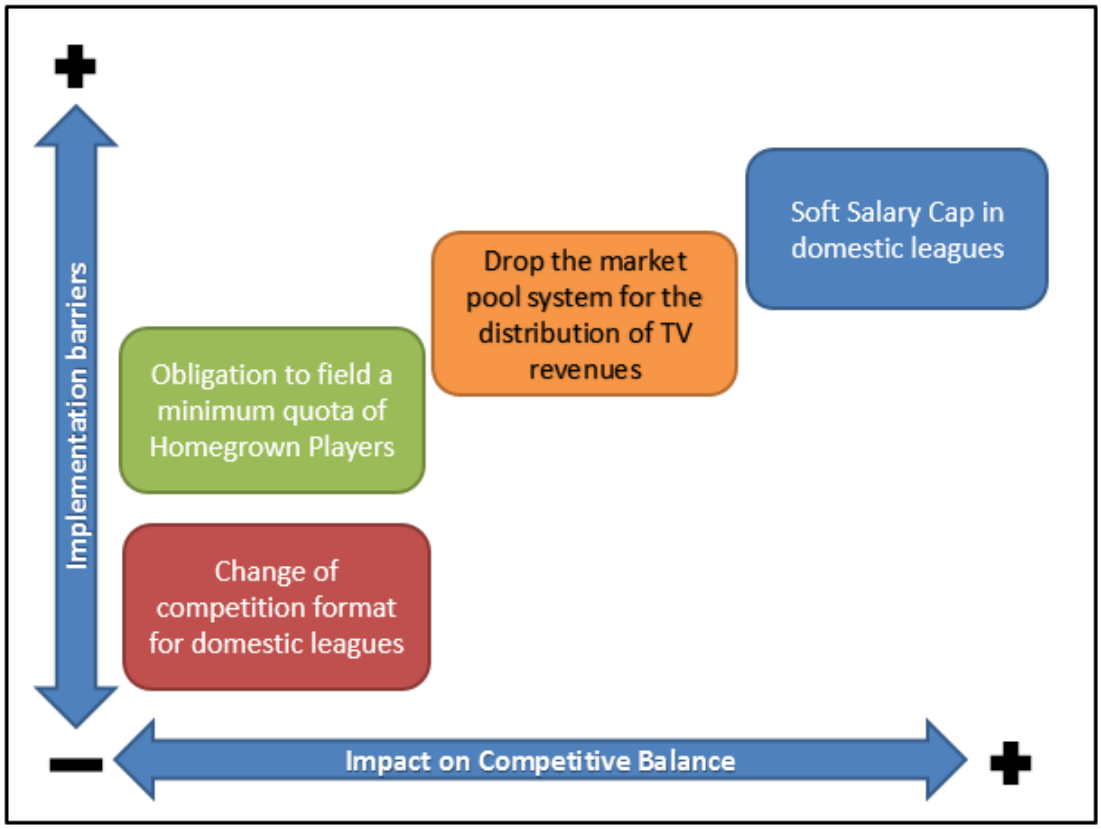
Whether this was diplomatic communication or real intentions, no one really knows. The exponential increase in TV revenues from both domestic leagues and the Champions League seems to have satisfied Europe’s biggest clubs for now. However, what will happen when this revenue growth begins to diminish? The European Super League might have been put aside for the next few years, but, for sure, this proposition will be on the table again at some point.

[69] (ECA, 2013), http://www.ecaeurope.com/news/eca-dismisses-idea-to-create-european-super-league/

8. Recommandations

Several proposals to produce better CB were explored in the analysis. We will now review and compare them in respect to their implementation barriers and effect on CB. Last but not least, we will address further research suggestions in the field of CB in European football.

The following figure points out the Impact on CB of each recommendation, and the implementations barriers. We can see the big gap on the bottom right of the matrix, meaning that there is unfortunately not an easy measure to implement that would greatly improve CB.



8.1 Suspend the market pool system for the distribution of TV revenues for the CL

- **Effect on CB :** Increase CB in European cups – could worsen CB in some domestic league
- **Implementation barriers :** high
- **Recommended** ✓

The actual distribution supports the big 5 teams dominance over European football. By dropping the market pool and redistribute the money equally between performance bonus and participation bonus, the distribution of revenues would be more even. The relationship between more financial strength and sporting results has been proven. Thus by introducing a financial tool able to reduce the disparities, the UEFA could foster CB in its competitions.

Moreover, the distribution of TV revenues in all the biggest domestic leagues, mainly depends on one team television audience, participating to the financial polarization. By adopting a more equal system, the UEFA would show the example and develop a debate questioning the relevance of the actual system.

Concerning the possible negative effects; by increasing the financial power of teams from smaller markets, the financial gap amongst smaller domestic markets could increase. So, by improving CB in its competition, UEFA could worsen CB in national leagues, therefore the implementation has to be well thought in order to have a positive effect on the general CB in European football. In order to safeguard domestic competitive balance, another financial constraint, such as the luxury tax, would be optimum. This is because it would redistribute monies from the Champions League amongst all the teams in the national leagues.

The implementation could create a lot of stir inside the industry. Indeed, this measure, would mean more financial risk for teams from the big 5, as their revenue would depend more on performance results. Discontent from big 5 teams could lead to the creation of a closed league between top teams, the so called European Super League. The UEFA also have to deal with the European anti-trust laws. Accordingly, the implementation barriers are considered as quite high.

8.2 Soft Salary cap in national league

- **Effect on CB :** very high
- **Implementation barriers:** very high
- **Recommended** ✓

Based on the soft salary cap with a luxury tax system model tested for the 2013/14 season of the Premier league, the ratio between the team which spend the most on wages and the one which spend the less would go from 5:1 to 3:1.

There is a positive correlation between total wages for a team and the total points accumulated in a season, so it is believed that this measure would highly improve CB.

The main losers would be the 5 teams with the highest payroll. On the contrary all teams which respect the cap would be the winners.

The implementation barriers are very high, we can expect the top teams to strongly lobby against a measure that would target them. A negative reaction from foreign media who have bought Premier League TV rights is also expected. Foreign media are more interested in clashes between the top teams. If these top teams would have less “top class players”, the Premier League product is likely to become less attractive. And, if other European leagues do not apply a SC, the English Premier League would be at disadvantage. Also the league has an incentive to see the best teams of the league perform well on a European basis. For local fans, who go to the game, those who do not support a team because it wins every week, the introduction of a SC would be a positive measure. But as we can see the interest of the strongest stakeholders would go against this proposal. Accordingly, the implementations barriers would be very high. This is probably why so far no football national association have introduced a fixed SC in their leagues.

Even though the implementation barriers are very high, this proposal is recommended if it is applied in all domestic league, in order not to create inequalities on an international scale.

8.3 Obligation to field at least 3 home grown players (HGP) in the UEFA competitions

- **Effect on CB :** low
- **Implementation barriers:** moderate
- **Not recommended**

When it comes to youth development, the UEFA must show the example. The first measure introduced in 2008 which obliges teams participating to an UEFA competition to include 8 HGP on the score sheet, paved the way for a football with more space for young players. All teams complied with the regulation, however, the average minutes played by HGP unfortunately remained the same as before.

A minimum quota of HGP players to be field would oblige teams to rely more on home talents and develop their academy. But the rule could be bypassed, by substituting directly players at the beginning of the game. Even though, of course, it would give an atrocious image for teams doing this.

In addition, the financial domination of a handful of teams in their league, would bring a fierce competition in trying to sign the best talents. Teams from smaller market would sell their best young player, and the effect on CB would remain low. In consequence, the measure is not recommended for all markets, it must be assessed based on one league environment whether or not the measure would be effective. But in the frame of the UEFA Champions League, it is not a recommended solution.

8.4 Gate revenue sharing

- **Effect on CB :** high
- **Implementation barriers** : too high
- **Not recommended**

Any revenue sharing system amongst team from a league would promote CB. Nonetheless, the measure would be impossible to apply in an industry where sharing equally the TV revenues is already subject to much debate.

In addition, teams which invest in new facilities have more gate revenues, as well as more debt resulting from these investments. On the other hand, teams with old stadiums do not have any amortization expenses and would benefit from this regulation. Thus, the

measure could dissuade club owners to invest in their facilities and promote short term vision. For these reasons, gate revenue sharing is not recommended.

8.5 Playoff system for the European leagues

- **Effect on CB :** low
- **Implementation barriers :** low to moderate
- **Recommended**✓

The main advantage of the playoff system is the multiplication of games between top teams. When 2 teams of the same level play against each other, the uncertainty of outcomes is greater and draws more interest from fans. The effect on game and seasonal uncertainty would be positive. Concerning long term uncertainty, we did not see any changes in the Belgian league.

A playoff system would increase the number of fixtures between top teams, which render the league more attractive as a TV product. The TV revenues in Belgium have increases by 60% and Belgian teams improved their results in Europe. We can therefore conclude that the league has become more competitive in European cups.

Conversely, implementing a system of playoffs implies some constraints. The number of teams in the first division would have to be reduced, to no to more than 16 teams. The smaller teams would strongly lobby against this competition format. On the other hand, as the number of teams plummets, the TV revenue share for the remaining teams would be higher.

Also the number of games is greater than in the actual system. Associations of players might therefore be against such a regulation. Indeed, today, the calendar is already hectic. Some teams play almost 60 games per year including European competition, domestic league and league cup.

The playoff competition format is recommended for any league which can afford to have a maximum of 16 teams in its league.

8.6 Further research suggestion

The impact of an equal distribution of TV revenues in the Champion's League has been found to be positive on international CB. However, further research on the effect on the domestic league would be necessary.

In all the measures put forward, the main barrier to the implementation is the actual structure of football in Europe. Some teams have become too strong for their leagues, and some leagues have become too weak to compete on an international level.

In this context, the consolidation of European football could be one of the key to rebalance the football industry. The creation of a European Super League is not only a fan's fantasy, but could really bring a solution to the existing problem. As well as the fusion of several football associations in order to create regional leagues. Evaluate implementation barriers and competitive balance effect of consolidation in European football would the necessary to go one step further.

9. Conclusion

Thanks to new and secondary data, the decrease in competitive balance has been proved. Competitive balance is key in order for football to appeal to more fans. This is why, actions that could increase competitive balance and go beyond the FFP have been sought.

A more equal distribution of TV revenue and limitation in wages (salary cap) were found to be the two most efficient recommendations in respect to their effects on competitive balance. Among all the new models of distribution of revenue for the Champions League proposed, the option 1, where most of the money is shared equally, is the option that would promote the most competitive balance. Concerning the salary cap, the results are better when applied with a very strict policy of financial penalties. Because when there are more limitations on the spending of top teams, financial gap reduces and the competitive balance increases. However, even though ideal in respect to competitive balance, these measures have been found difficult to apply, as it would go against the interest of too many powerful stakeholders. Indeed, if too much money was taken away from the top teams, they could break-away and create their own league. As a result, unfortunately for the fans interest, compromises will be necessary in terms of the strictness of measures that will be adopted and applied.

The distribution of revenues from TV broadcasting rights has been found to be one of the main cause of the financial polarization. A model of distribution without taking into account the market pool for the Champions League has been tested. The results are conclusive and would foster more competitive balance on an international scale. The ideal revenue model would distribute the same amount of money to every team. However, a system where 57,5% of revenue is shared equally and 42,5% according to performances is recommended. It would be an applicable solution and efficient in respect to competitive balance.

Concerning the payroll regulations. A soft salary cap with a luxury tax based on the NBA system was found very efficient for restoring competitive balance. Indeed, as in Europe the financial gap between big and small teams is colossal, teams would not be able to respect a hard salary cap. This is why, a luxury tax would make more sense in European football, and it would allow teams to go over the salary cap by paying a tax which would then be redistributed equally amongst all teams. In the model tested in the English Premier League, a tax rate of 40% was applied, resulting in a decrease by 30% of the financial gap between the richest and poorest teams. The tax rate is of course a very sensitive factor, the higher it is the more balanced the league is. But once again, a

compromise has to be made between all the stakeholders, so that the measure could realistically be applied.

The possible implementation of a playoff system is another option addressed. The playoff system is widely used in others sports and adds more uncertainty to the end of a season. Since 2009, Belgium has become the first European domestic league to have playoffs. Although not popular amongst fans because too complicated, playoffs had a positive effect on Belgian's team's competitiveness in the UEFA cups. And TV revenues rose by 60%. However, in a playoff system, the number of teams in the league has either to be increased or decreased. It must therefore be assessed based on a league environment, whether or not the measure is applicable.

Concerning the share of gate revenues, it is not a recommended option. Because it would prevent teams' owners from investing in stadium facilities and adopting long term vision.

Oblige teams to field homegrown players was not found conclusive. As it could result in a transfer war on young talents, which would not serve the interest of the small teams and thus not foster competitive balance.

For all the measures, the implementation barriers were found to be particularly high, due to the environment of European football. But competitive balance is key and must be subject to discussion by the UEFA and the domestic football associations. What vision for the football of tomorrow? Do we want a sport where all the games can become more exciting? Or favor top teams in order to assist to a couple of clashes per year involving the best players of the planet on the same pitch?

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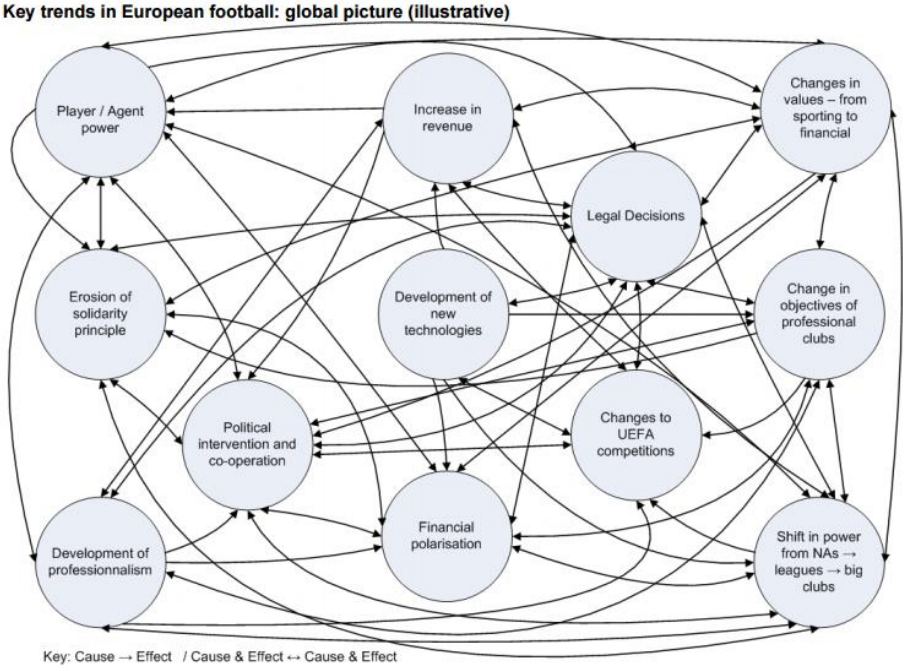
Appendix 1 : Key trends in European football

Graphic 2: Key trends in European football: global picture (illustrative)



Appendix 2 : Distribution of revenues for the Champions League – Comparison between the current model and without market pool - option 1

CURRENT MODEL	Participation Bonus (€ million)	Market Pool (€ million)	Performances Bonus (€ million)	Total
Real madrid	8600	20514	28300	57'414
PSG	8600	33917	11900	54'417
Atletico	8600	17148	24300	50'048
Man Utd	8600	23775	12400	44'775
Bayern München	8600	18716	17300	44'616
Chelsea	8600	18491	16300	43'391
Juventus	8600	31998	2500	43'098
Barcelona	8600	21475	11900	41'975
Napoli	8600	25998	4000	38'598
Milan	8600	21999	7000	37'599
Man City	8600	18302	8500	35'402
Dortmund	8600	14725	11400	34'725
OM	8600	23815	0	32'415
Olympiacos	8600	11806	7000	27'406
Arsenal	8600	11132	7500	27'232
Bayer Leverkusen	8600	10735	7000	26'335
Shalke	8600	8120	7000	23'720
Kopenhaguen	8600	11392	1500	21'492
Ajax	8600	9604	3000	21'204
Galatasaray	8600	6472	6000	21'072
Zenit	8600	4771	6000	19'371
Celtic	8600	7966	1000	17'566
Real sociedad	8600	8174	500	17'274
Benfica	8600	3274	3500	15'374
Steaua Bucarest	8600	5100	1500	15'200
CSKA	8600	5585	1000	15'185
Porto	8600	3618	2000	14'218
Shaktar Donetsk	8600	2450	3000	14'050
Basel	8600	1684	3000	13'284
Wien	8600	2174	2000	12'774
Anderlecht	8600	3142	500	12'242
Viktoria	8600	1528	1000	11'128

AVERAGE	8'600	12'800	6'869	28'269
STD DEV	0	9'034	6'818	13'577
TOTAL	275'200	409'600	219'800	904'600

Option 1	Participation Bonus (€ million) + money from MP	Performances Bonus (€ million)	Total
Real madrid	21'400	28'300	49'700
PSG	21'400	11'900	33'300
Atletico	21'400	24'300	45'700
Man Utd	21'400	12'400	33'800
Bayern München	21'400	17'300	38'700
Chelsea	21'400	16'300	37'700
Juventus	21'400	2'500	23'900
Barcelona	21'400	11'900	33'300
Napoli	21'400	4'000	25'400
Milan	21'400	7'000	28'400
Man City	21'400	8'500	29'900
Dortmund	21'400	11'400	32'800
OM	21'400	0	21'400
Olympiacos	21'400	7'000	28'400
Arsenal	21'400	7'500	28'900
Bayer Leverkusen	21'400	7'000	28'400
Shalke	21'400	7'000	28'400
Kopenhaguen	21'400	1'500	22'900
Ajax	21'400	3'000	24'400
Galatasaray	21'400	6'000	27'400
Zenit	21'400	6'000	27'400
Celtic	21'400	1'000	22'400
Real sociedad	21'400	500	21'900
Benfica	21'400	3'500	24'900
Steaua Bucarest	21'400	1'500	22'900
CSKA	21'400	1'000	22'400
Porto	21'400	2'000	23'400
Shaktar Donetsk	21'400	3'000	24'400
Basel	21'400	3'000	24'400
Wien	21'400	2'000	23'400
Anderlecht	21'400	500	21'900
Viktoria	21'400	1'000	22'400

AVERAGE	21'400	6'869	28'269
STD DEV	0	6'818	6'818
TOTAL	684'800	219'800	904'600

Appendix 3 : Distribution of revenues for the Champions League – Comparison between the current model and without market pool - option 2

CURRENT MODEL	Participation Bonus (€ million)	Market Pool (€ million)	Performances Bonus (€ million)	Total
Real madrid	8600	20514	28300	57'414
PSG	8600	33917	11900	54'417
Atletico	8600	17148	24300	50'048
Man Utd	8600	23775	12400	44'775
Bayern München	8600	18716	17300	44'616
Chelsea	8600	18491	16300	43'391
Juventus	8600	31998	2500	43'098
Barcelona	8600	21475	11900	41'975
Napoli	8600	25998	4000	38'598
Milan	8600	21999	7000	37'599
Man City	8600	18302	8500	35'402
Dortmund	8600	14725	11400	34'725
OM	8600	23815	0	32'415
Olympiacos	8600	11806	7000	27'406
Arsenal	8600	11132	7500	27'232
Bayer Leverkusen	8600	10735	7000	26'335
Shalke	8600	8120	7000	23'720
Kopenhaguen	8600	11392	1500	21'492
Ajax	8600	9604	3000	21'204
Galatasaray	8600	6472	6000	21'072
Zenit	8600	4771	6000	19'371
Celtic	8600	7966	1000	17'566
Real sociedad	8600	8174	500	17'274
Benfica	8600	3274	3500	15'374
Steaua Bucarest	8600	5100	1500	15'200
CSKA	8600	5585	1000	15'185
Porto	8600	3618	2000	14'218
Shaktar Donetsk	8600	2450	3000	14'050
Basel	8600	1684	3000	13'284
Wien	8600	2174	2000	12'774
Anderlecht	8600	3142	500	12'242
Viktoria	8600	1528	1000	11'128
AVERAGE	8'600	12'800	6'869	28'269
STD DEV	0	9'034	6'818	13'577
TOTAL	275'200	409'600	219'800	904'600

Option 2	Participation Bonus (€ million)	Performances Bonus (€ million) + money of MP	Total
Real madrid	8'600	81'037	89'637
PSG	8'600	34'076	42'676
Atletico	8'600	69'583	78'183
Man Utd	8'600	35'508	44'108
Bayern München	8'600	49'539	58'139
Chelsea	8'600	46'675	55'275
Juventus	8'600	7'159	15'759
Barcelona	8'600	34'076	42'676
Napoli	8'600	11'454	20'054
Milan	8'600	20'045	28'645
Man City	8'600	24'340	32'940
Dortmund	8'600	32'644	41'244
OM	8'600	0	8'600
Olympiacos	8'600	20'045	28'645
Arsenal	8'600	21'476	30'076
Bayer Leverkusen	8'600	20'045	28'645
Shalke	8'600	20'045	28'645
Kopenhaguen	8'600	4'295	12'895
Ajax	8'600	8'591	17'191
Galatasaray	8'600	17'181	25'781
Zenit	8'600	17'181	25'781
Celtic	8'600	2'864	11'464
Real sociedad	8'600	1'432	10'032
Benfica	8'600	10'022	18'622
Steaua Bucarest	8'600	4'295	12'895
CSKA	8'600	2'864	11'464
Porto	8'600	5'727	14'327
Shaktar Donetsk	8'600	8'591	17'191
Basel	8'600	8'591	17'191
Wien	8'600	5'727	14'327
Anderlecht	8'600	1'432	10'032
Viktoria	8'600	2'864	11'464
AVERAGE	8'600	19'669	28'269
STD DEV	0	19'524	19'524
TOTAL	275'200	629'400	904'600

Appendix 4 : Distribution of revenues for the Champions League – Comparison between the current model and without market pool - option 3

CURRENT MODEL	Participation Bonus (€ million)	Market Pool (€ million)	Performances Bonus (€ million)	Total
Real madrid	8600	20514	28300	57'414
PSG	8600	33917	11900	54'417
Atletico	8600	17148	24300	50'048
Man Utd	8600	23775	12400	44'775
Bayern München	8600	18716	17300	44'616
Chelsea	8600	18491	16300	43'391
Juventus	8600	31998	2500	43'098
Barcelona	8600	21475	11900	41'975
Napoli	8600	25998	4000	38'598
Milan	8600	21999	7000	37'599
Man City	8600	18302	8500	35'402
Dortmund	8600	14725	11400	34'725
OM	8600	23815	0	32'415
Olympiacos	8600	11806	7000	27'406
Arsenal	8600	11132	7500	27'232
Bayer Leverkusen	8600	10735	7000	26'335
Shalke	8600	8120	7000	23'720
Kopenhaguen	8600	11392	1500	21'492
Ajax	8600	9604	3000	21'204
Galatasaray	8600	6472	6000	21'072
Zenit	8600	4771	6000	19'371
Celtic	8600	7966	1000	17'566
Real sociedad	8600	8174	500	17'274
Benfica	8600	3274	3500	15'374
Steaua Bucarest	8600	5100	1500	15'200
CSKA	8600	5585	1000	15'185
Porto	8600	3618	2000	14'218
Shaktar Donetsk	8600	2450	3000	14'050
Basel	8600	1684	3000	13'284
Wien	8600	2174	2000	12'774
Anderlecht	8600	3142	500	12'242
Viktoria	8600	1528	1000	11'128
AVERAGE	8'600	12'800	6'869	28'269
STD DEV	0	9'034	6'818	13'577
TOTAL	275'200	409'600	219'800	904'600

Option 3	Participation Bonus (€ million) + 60% from MP	Performances Bonus (€ million) + 40% from MP	Total
Real madrid	16'280	49'395	65'675
PSG	16'280	20'770	37'050
Atletico	16'280	42'413	58'693
Man Utd	16'280	21'643	37'923
Bayern München	16'280	30'196	46'476
Chelsea	16'280	28'450	44'730
Juventus	16'280	4'364	20'644
Barcelona	16'280	20'770	37'050
Napoli	16'280	6'982	23'262
Milan	16'280	12'218	28'498
Man City	16'280	14'836	31'116
Dortmund	16'280	19'898	36'178
OM	16'280	0	16'280
Olympiacos	16'280	12'218	28'498
Arsenal	16'280	13'091	29'371
Bayer Leverkusen	16'280	12'218	28'498
Shalke	16'280	12'218	28'498
Kopenhaguen	16'280	2'618	18'898
Ajax	16'280	5'236	21'516
Galatasaray	16'280	10'472	26'752
Zenit	16'280	10'472	26'752
Celtic	16'280	1'745	18'025
Real sociedad	16'280	873	17'153
Benfica	16'280	6'109	22'389
Steaua Bucarest	16'280	2'618	18'898
CSKA	16'280	1'745	18'025
Porto	16'280	3'491	19'771
Shaktar Donetsk	16'280	5'236	21'516
Basel	16'280	5'236	21'516
Wien	16'280	3'491	19'771
Anderlecht	16'280	873	17'153
Viktoria	16'280	1'745	18'025
AVERAGE	16'280	11'989	28'269
STD DEV	0	11'900	11'900
TOTAL	520'960	383'640	904'600